

*Indian Journal of*

# **Adult Education**

- **Towards Effective Planning of Adult and Non-Formal Education Programmes**
- **Scientific Literacy—Its Impact on Neo-Literates**
- **Sustaining Literacy in a Non-Literacy Milieu**
- **Training in Adult Education in India**
- **Nonverbal Communication—An Important Mode of Communicating with Farmers**



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Contributions should be accompanied by either a stamped, self-addressed envelope or by International Reply Coupons. The average length of a manuscript should normally be between 1500 and 2000 words; in exceptional cases, longer articles can be accepted. Mimeographed, Xeroxed or carbon copies of manuscripts will not be accepted. Manuscript should be typed in double space, on one side, with a 2" margin, on foolscap size paper. Footnotes and references should come at the end and not on every page.

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## OUR CONTRIBUTORS

*Clement I. Imhabekhai*, Department of Adult Education and Extra-Mur- Studies, University of Benin, Benin City, Nigeria.

*Manjula P. Rao* is Senior Lecturer in Education, Regional Institute of Education (NCERT), Mysore, Karnataka.

*A. Mathew* is Fellow, National Institute of Adult Education, New Delhi.

*Sita Vanka* is Senior Lecturer & Head, Dept. of Public Administration, V.V. Evening College of Arts and Commerce, Hyderabad, A.P.

*B.S. Garg* and *K.C. Choudhary* are President and General Secretary respectively, Indian Adult Education Association, New Delhi.

*Rajinder Peshin* is Agricultural Extension Officer, Department of Agriculture, Government of Jammu and Kashmir, *Rajinder Kalra* and *S.S. Gill* are Assistant Professor and Professor cum-Head respectively, Department of Extension, Punjab Agricultural University, Ludhiana, Punjab.

*Katy Newell-Jones*, *Jan Grant*, *Nick Hutchinson* and *Julia Robinson* are Consultants in Education and Training, Chesham, Bucks, U.K.

*S.Y. Shah* is Director, Adult, Continuing Education and Extension Unit, Jawaharlal Nehru University, New Delhi.

**Editorial**

The theme of the Second Asia Regional Literacy Forum, held in New Delhi during 9-13 February 1998, was "Innovation and Professionalisation in Adult Literacy—A Focus on Diversity." The Forum, while reviewing the problems of literacy within the rich and complex diversity of pluralistic societies, discussed how literacy and non-formal education could help to "respond effectively to the region's new development needs, while also providing a greater democratic participation and a culture of openness and tolerance to its various linguistic communities." Delivering the keynote address to the Forum, the Janapith and Magsaysay award winner, Ms. Mahasweta Devi had said that those who talk of adult literacy should try to understand the country first. Books on adult literacy be such that the target groups can relate to it. She had also said: "Only people who know the local milieu should be trained to educate adult learners, for a lot can be achieved through simple things like story telling."

Non-formal education is the rediscovery of an old and tested truth that education takes place in a multiplicity of locales. It involves discussion and mutual sharing rather than lectures and discourses. It is continuous with all of one's life, and it can be tailored to the needs of different ages, groups and professions in society. Even today, both in the developing and developed countries, the major part of a person's education takes place outside the four walls of a class room.

In the learning society of the future, non-formal education can provide a variety of educational opportunities to many more people and thereby reduce the mass-elite gap. Farmers, workers, small entrepreneurs and others who have never been to school and perhaps never will—can get useful skills and knowledge through non-formal education, and thus contribute to their own

and nation's development. Secondly, non-formal education can play its role as continuing education and act as a supplement to formal schooling for the large number of primary and secondary school leavers, dropouts and pushouts with a view to train them for productive employment. Thirdly, non-formal education can help to upgrade the skills and competence of those who are already employed; it is recognised that through non-formal education intended learning occurs in activities that are not called "education", for example, community development, planning, agricultural extension, health services, etc., of which education is an essential process and learning is an important outcome.

Education is an essential component of every development service in society. Every development service requires the understanding, appreciation and participation of the people whom it is meant to serve, and this is achieved only through education—not formal, but non-formal and informal. In other words, education has to contain a totally non-conformist and non-traditional approach.

Clement I. Imhabekhai

## **Towards Effective Planning of Adult and Non-Formal Education Programmes in Developing Countries**

Planning is the process by which the objectives of a programme are identified and procedures for the attainment of these objectives are spelt out. Successful implementation of any programme is a function of the quality of planning carried out before the commencement of implementation. In adult and non-formal education programmes, for their desired objectives to be realised, there is need for adequate planning. Effective planning in adult and non-formal education brings about formulation of rational policies and programme objectives based on careful situational analysis, identification of existing human and material resources, forecasting of needs, and mapping out strategies for successful accomplishment.

### **Educational Planning**

Educational planning involves deliberate efforts in collecting, collating and analysing educational data relating to resources, processes, methods, inputs and outputs of the educational system to ensure realisation of the objectives which the educational system is expected to meet for a particular society. According to Aghenta (1993)

Educational planning involves the collection of education related data to determine the status of the economy, socio-cultural and political development of the society and what place has been accorded to it on the one hand, and on the other hand, it helps planners to use analysed data to make projections for future development taking specific note of available and potential material and financial resources to achieve the proposed objectives.

Educational planning is both diagnostic and prognostic. In other words, it is futuristic and prospective.

Realisation of programme objectives in adult and non-formal education depends largely on the effectiveness of programme planning processes. Adult and non-formal education programmes are diverse and cover various activities designed to complement and supplement the formal education programmes. However, most adult and non-formal education programmes are usually specific, integrative, intensive and tailored to meet the immediate needs of the participants.

Most often, participants in adult and non-formal education programmes want quick returns from their investments of money, time, efforts and material resources on adult and non-formal education programmes. When these returns are not being realised as expected, many participants become despondent or frustrated and some even back out of the programmes. According to Obi (1989), adults are generally voluntary learners. They 'walk into' and participate actively

in educational programmes which they perceive will satisfy their immediate needs and interests. On the other hand they withdraw from participating in an educational programme which they perceive as irrelevant to their immediate needs and interests for various lame excuses.

Planning will ensure that participants who enrol in adult and non-formal education programmes derive their desired satisfaction and stay on in the programmes till completion.

Effective planning of adult and non-formal education programmes is inhibited by some factors discussed below :

### **(i) Problem of Accurate Population Data**

Planning of adult and non-formal education programmes requires accurate population data giving information on the growth of the population, changes over time, structure according to age, sex, occupation and geographical distribution, level of education vis-a-vis illiteracy, etc. These data will help planners to identify who needs a particular type of education or training. In most developing countries, population statistics are not reliable since the conduct of population census is always influenced by many factors which incidentally make census results unreliable.

Population census is expected to be conducted every ten years but most developing countries hardly conduct population census when they are expected to do so, because, it is a very expensive exercise and funds available may not be enough to conduct the same. When some of them conduct census, the figures or results are always controversial and unreliable which render them unsuitable for effective planning. Meaningful projections which are vital in educational planning become elusive.

### **(ii) Problem of Statistical Data**

Statistical data are usually of two categories, namely, qualitative data and quantitative data. Qualitative data, according to Nwadiani (1993), could be philosophical concepts, equality of educational opportunities, morality of students, morale of educational personnel, interest in school, etc. They may include educational policies, objectives of education and contents or curriculum of educational system. Qualitative data serve as guiding principles for planning educational programmes and as yardsticks for measuring the efficiency of the educational system.

Quantitative data are facts and figures which are quantifiable and are used in giving meaningful interpretation and aid decision-making process, implementation and evaluation of educational programmes.

The importance of statistical data in educational planning cannot be overemphasised. No effective planning can be attained without reliable data. According to Wadepole (1974), statistics enables one not only to predict and test hypotheses but also to determine the accuracy of decision made by somebody. Decision-making is the hallmark of educational planning.

Important as statistical data are in planning adult and non-formal education

programmes, their utilisation is beset with a lot of problems which include :

(i) *Poor record keeping* : Most agencies involved in adult and non-formal education programmes, including Government agencies, do not keep accurate records of resources, inputs, enrolment, staff attrition, drop-out rates of participants, successful completers and progress made by beneficiaries. These data and others are very important for effective planning and any inaccuracy in or lack of them inhibit effective planning in adult and non-formal education.

(ii) *Storage and Retrieval System* : Another problem associated with statistical data is the storage system and difficulty in retrieving data when needed for a planning activity. In most developing countries, statistical data relating to adult and non-formal education are still being kept in paper and files and put on file racks and cabinets where they are susceptible to destruction through shuffling, water and fire hazards, rodents and insects. Retrieval of such data is usually irksome because of the manner in which they are kept. Modern facilities for record keeping and easy retrieval are not readily available and all these limit the effectiveness of utilising such data for planning adult and non-formal education programmes.

(iii) *High cost of data collection and processing* : Gathering, collating and analysing statistical data are very expensive. Experts in these activities are very few and those available are highly paid while the material resources required are quite expensive. Similarly, the processes of administering various data collection instruments are costly and funds are not usually provided adequately for these by government and relevant agencies in most developing countries. All these affect effective planning in adult and non-formal education.

(iv) *Life-span of data* : The life span of statistical data is influenced by the nature of the data, trends in the agency and other related agencies. Statistics collected may become outdated within a short period of time and if planners in adult and non-formal education base their projections or decisions on outdated data, the outcome will be wrong projections/decisions. Statistical data collection, collating and analyses, should, therefore, be on-going processes in adult and non-formal education programmes.

### **(iii) Paucity of experts**

Successful planning of adult and non-formal education programmes will depend largely on the availability of sufficient experts or experienced planners. The situation in which Government officials with little or no training in planning adult and non-formal education are given the responsibility for such important tasks, as is often done in developing countries, renders the outcome porous and ineffective.

Occasionally, experts are deputed by international agencies like the United Nations Development Programme (UNDP) and the United Nations Educational, Scientific and Cultural Organisation (UNESCO) to assist in planning adult and non-formal education programmes, but what is most required is for the experts to give training to their local counterparts so that they can perform their planning functions effectively after the departure of the foreign experts.

Most researchers and scholars concentrate on content areas, methodology, principles and practice of adult and non-formal education rather than in planning, which is why, the bulk of publications available in the field of adult and non-formal education are focussed mainly on such areas.

#### **(iv) Inadequate funding**

Adult and non-formal education programmes have often suffered from inadequate funding. Budgetary allocations to the programmes by Governments have always been abysmally low and the paltry sums allocated are either diverted or misappropriated. Poor budgetary allocations and misappropriation of funds leave little or no fund for planning purposes. Planning is expensive and if no sufficient fund is available for the exercise, it is either not done at all, or it is haphazardly done. This is not in the best interest of programme implementation.

#### **Nature of Adult and Non-formal Education**

The diverse nature of adult and non-formal education programmes makes planning a Herculean task. Adult and non-formal education programmes consist of basic literacy, continuing education, distance education, health extension, agricultural extension, extra-mural studies, social welfare, community development, liberal education, environmental education, on-the-job and off-the-job training, etc. The multiplicity of all these programmes renders the possibility of one agency planning the numerous programmes difficult. On the other hand, universal definition of each of the terms has not been possible since one term may mean one thing in one country and yet another thing in another country. Planning is only feasible when there is uniformity in definitions, perception and approaches to the issues.

The problems inhibiting effective planning in adult and non-formal education are not insurmountable if there is a strong will on the part of Governments and the various agencies that provide adult and non-formal education. Necessary measures should be evolved to facilitate effective planning in adult and non-formal education programmes.

It is very important that each nation endeavours to conduct trouble-free population census and ensures the data so collected are reliable for planning purposes that require demographic data. Similarly, there is a need to improve the quality of vital registration of birth, death and movement of people into and out of the country and within the country.

It is imperative that efforts are made to know the total number of illiterates by sex and age structure, drop-out rate in the formal school system and the number of those who want to participate in non-formal education programmes. Departments of planning and statistics in the Ministries of Education should, therefore, be made to be functional and effective in collecting, collating and analysing and storing related educational data. Such Departments should be staffed with trained educational planners.

In order to reduce or eliminate totally the problems associated with the

storage and cumbersome retrieval data, it is necessary to give greater attention to information management technology and procure computer software and other devices for storage of information. Data stored in the computer system can easily be retrieved from the system when needed for planning.

The periodic submission of accurate statistical data on enrolment, completion, inputs etc., by all the personnel involved in adult and non-formal education should be made mandatory. The data submitted should be verified, where possible, to ascertain their validity and reliability.

The quality of performance of any programmes is influenced by the level of funding. It is important that adult and non-formal education programmes are adequately funded. This will ensure availability of funds needed for planning adult and non-formal education programmes. If internal sources of funds are not adequate, as it is in most developing countries, financial assistance could be sourced externally.

There is need to step up training and retraining programmes for the personnel responsible for planning adult and non-formal education programmes. The quality of knowledge, skill and competence possessed by those who perform planning tasks is a function of the quality of training and retraining they receive. Consequently, these people should be exposed to special training programmes in planning adult and non-formal education programmes. There is need for the University Departments of Adult Education in developing countries to mount realistic graduate programmes in planning of adult and non-formal education programmes as it is in the case of formal education. The adoption of modern information management technology will necessitate training or retraining for those who will use the equipment to achieve the desired objectives.

Planning is a profession and those involved in it should be given requisite education and training to equip them with knowledge, skills, attitude, work habits and competences needed for planning functions. Planning is a discrete and conscious activity, not something to be haphazardly performed. It is only when those involved in planning adult and non-formal education realise this and do whatever is required to make their planning effective that the fruits of adult and non-formal education can be richly harvested.

## References

- Aghenta, J.A. (1993), *Principles and Practices of Educational Planning : Focus on Developing Countries*, Benin-City : Nigerian Society of Educational Planners.
- Nwadiani, Mon (1993), Presentation and Data Analysis, In Ehiamentolor, E.T. and M. Nwadiani (eds), *A Practical Guide to Research in Education and Social Sciences*, Benin-City : Nigerian Educational Research Association.
- Obi, G.O. (1989), Approaches to Programmes Planning In F.C. Okafor *et al* (ed) *Administration of Adult Education*, Uruowulu-Obosi; Pacific Publishers.
- Wadepole, R.E. (1975), *Introduction to Statistics*, 2nd Edition, New York : Macmillan Publishing Company Inc.

Manjula P. Rao

## **Scientific Literacy—Its Impact on Neo-Literates**

The world is at the threshold of a new century, with all its promise, possibilities, and scientific and technological advancements. Scientific advancement is becoming so vast and swift, that the older technologies are being replaced with new ones at a very fast rate, thus becoming omnipresent in their applications and impact on society. Education is facing a major challenge on how to prepare the citizens to cope with the twenty-first century and its increased use of science and technology. Coping with the challenges associated with health, nutrition, environment, energy sources, finite resources, population control, global change, and sustainable development at the local, national and international levels is surely a part of the basic learning needs. These social issues need an increasing degree of scientific literacy on the part of the people for their understanding of science and technology in everyday life. In this regard, scientific literacy becomes essential for all to meet the challenges of the increasing impact of science on people's lives, individually or in relation to society. Scientific literacy also becomes useful for their own development and resulting in better quality of life.

Scientific literacy is referred to as "the basic understanding of science and its application in society by everyone, in order to make informed decisions in their daily lives to function effectively as citizens."

Scientific literacy is the education which enables people to become aware of their surroundings, to apply the knowledge acquired in situations of every day life, to use their reason and critical ability in making decision regarding their daily lives; and to participate effectively in issues and matters relating to the advancing science which would have an impact on human lives.

In light of the above criteria, the five important components of scientific literacy that emerge are : (a) knowledge of significant facts, concepts and principles, (b) ability to apply relevant knowledge of science in everyday life situations, (c) ability to utilize the processes of scientific enquiry, (d) understanding of important interactions of science and technology with society and (e) possession of informed attitudes and interests related to science.

To demystify science, it must become accessible to all men, women and children, both in urban and rural settings. The conventional attitude that science is an academic subject which has to be studied as a part of school or college education should be changed, and a new thinking of viewing "science education for all," both in formal and non-formal settings, should emerge. People should be made aware of the fact that much of their daily activities have scientific origins. For instance, the rural population need to be aware of a few common things like use of fertilizers, selecting health giving foods, safety rules for

operating household tools or industrial machines, harmful diseases and their prevention, child care, health practices, and other environment related issues. There is a need for people to be functional in an increasingly technological environment, and to participate meaningfully in science-related political issues. With this framework, a study was carried out to develop the curriculum on Scientific Literacy and to study its effectiveness.

### **Objectives**

The main objectives of the study were (i) to identify the level of scientific awareness and scientific attitude of neo-literates, (ii) to develop the Scientific Literacy curriculum, (iii) to study its effectiveness in terms of neo-literates' attainment in scientific awareness and development of scientific attitude, and (iv) to study the relationship between scientific awareness and scientific attitudes.

### **Sample of the study**

Since the Scientific Literacy curriculum was developed keeping the rural population as the main focus, the neo-literates, who could read and write to some extent, from the two mandals of K.R. Nagar Taluk (Arikare Koppal and Dornahalli) of Mysore district were selected. The total sample consisted of 65 neo-literates, 45 women and 20 men. The age of the sample varied from 20 to 45 years, and most of them were Hindus, except two or three who were Christians.

### **Design**

The study, being essentially developmental and quasi-experimental in nature, was carried out in three phases.

**Phase 1** involved the development of Scientific Literacy curriculum, the instruments to be employed (scientific awareness test, and scientific attitude scale), the various learning experiences in terms of media and methods, and the self-instructional materials. **Phase 2** involved tryout of the curriculum developed and **Phase 3** involved the actual implementation where the curriculum and the tests were implemented to a sample of 65 neo-literates identified from the K.R. Nagar taluk. A single group pre and post-test design was used in the study.

### **Instrumentation**

(i) The Scientific awareness test was developed to measure the awareness level of neo-literates regarding science in everyday life. Around 50 items were developed to measure the neo-literates' awareness of science in daily life, environmental hazards, health and hygiene, nutrition, accidents and first aid, diseases and preventive measures, electricity, our solar system and social implications of science.

(ii) The scientific attitude scale was developed keeping in mind some of

the components such as (a) open mindedness, (b) critical observation, (c) lack of superstitions and blind beliefs, (d) suspended judgement, (e) believing on the basis of evidential support, and (f) free from personal biases and prejudices. A part of the scale was prepared by using a five point scale ranging from "strongly agree" to "strongly disagree" and the rest of the scale was developed by providing situations with a course of actions to be chosen.

### **Scientific Literacy—Curriculum**

The contents selected comprised 22 units centred around the themes like science and technology, and their implications on human lives, nutrition and important technologies, food preservation, diseases and prevention technologies, human reproduction and child care, hazards of accidents and prevention technologies, conservation of environment and wild life, electricity, cooking fuel technologies and the universe around us. Certain principles of andragogy were kept in mind while selecting the learning experiences. The learning experiences planned and used to teach the contents were (1) self-instructional material, (ii) small lectures followed by discussions, (iii) question-answer form, (iv) pictures, (v) audio-recorded sambashane (conversation) on certain themes like small family and environmental pollution, (vi) folk songs, (vii) skits, (viii) films, (xi) group activities and exercises, and (x) demonstrations. The folk songs and skits were the unique features among the other learning experiences, because the rural people of the selected taluk were more familiar with these two media which were very powerful to convey messages. The folk songs on themes like deforestation, environmental protection and small family were composed with the help of local village youth.

### **Implementation**

The tried out tools were pretested before the implementation of the Scientific Literacy curriculum. Around 36 sessions (each session ranging from 60 to 90 minutes) were taken at each Mandal to teach the Scientific Literacy content through various strategies. At the end of the programme the post-tests were administered.

## **ANALYSIS OF THE STUDY**

### **(i) Effectiveness of Scientific Literacy Curriculum on Scientific Awareness**

The mean differences obtained between the pre and post-scientific awareness of neo-literates are given in the Table 1. The 't' value of 6.26 was found to be significant, thereby implying that there is a significant difference between the pre- and the post-test measures of scientific awareness of neo-literates, which clearly indicates the effectiveness of Scientific Literacy curriculum in improving the scientific awareness of neo-literates.

**Table 1 : Pre-test and post-test measures of scientific awareness of neo-literates**

| <i>Scientific awareness</i> | <i>Sample size</i> | <i>Mean</i> | <i>SD</i> | <i>'t' value</i> |
|-----------------------------|--------------------|-------------|-----------|------------------|
| Pre-test                    | 65                 | 33.18       | 14.40     | 6.26*            |
| Post-test                   | 65                 | 51.15       | 20.64     |                  |

\* Significant at 0.01 level.

**(ii) Difference between male and female neo-literates in their scientific awareness**

The difference between male and female neo-literates in their scientific awareness is studied by considering their pre and post-test measures on scientific awareness, the results of which are presented in Table 2. It is found that though there was no difference between males and females in their scientific awareness on pre-test occasion, the post-test results revealed a significant mean difference between both. It is seen that the female neo-literates achieved better on scientific awareness test after the curriculum implementation when compared to males.

**Table 2 : Mean difference between male and female neo-literates on pre and post-scientific awareness test**

| <i>Neo-literates</i> | <i>N</i> | <i>Mean (pre-test)</i> | <i>Mean (post-test)</i> | <i>'t' value (pre-test)</i> | <i>'t' value (post-test)</i> |
|----------------------|----------|------------------------|-------------------------|-----------------------------|------------------------------|
| Males                | 20       | 29.10                  | 44.20                   | 1.40                        | 2.94*                        |
| Females              | 45       | 34.84                  | 54.24                   |                             |                              |

\* Significant at 0.01 level.

**(iii) Effectiveness of the Scientific Literacy curriculum on formation of scientific attitude**

The mean differences obtained on scientific attitude scale on pre and post-test occasions are given in Table 3. It is found that there is quite a large difference between the pre and the post-scientific attitude measures. This difference definitely attributes to effectiveness of scientific literacy curriculum in developing proper scientific attitude among neo-literates.

**Table 3 : Pre-test and post-test measures of scientific attitude of neo-literates**

| <i>Scientific Awareness</i> | <i>N</i> | <i>Mean</i> | <i>SD</i> | <i>t' value</i> |
|-----------------------------|----------|-------------|-----------|-----------------|
| Pre-test                    | 65       | 61.12       | 12.74     | 8.82*           |
| Post-test                   | 65       | 80.35       | 10.64     |                 |

\* Significant at 0.01 level.

**(iv) Difference between male and female neo-literates in their scientific attitude**

The Table 4 shows that there is a difference in the means of scientific attitude of males and females on both pre and post-test occasions. Though the males have shown a considerable improvement in their scientific attitude after the curriculum implementation, yet they fall short in their scientific attitude when compared to female neo-literates.

**Table 4 : Mean difference between male and female neo-literates on pre and post-scientific attitude tests**

| <i>Neo-literates</i> | <i>N</i> | <i>Mean (pre-scientific attitude)</i> | <i>Mean (post-scientific attitude)</i> | <i>t' value</i>                  |                                   |
|----------------------|----------|---------------------------------------|--|----------------------------------|-----------------------------------|
|                      |          |                                       |  | <i>(pre-scientific attitude)</i> | <i>(post-scientific attitude)</i> |
| Males                | 20       | 56.15                                 | 69.70                                  | 2.60*                            | 5.13**                            |
| Females              | 45       | 64.91                                 | 85.08                                  |                                  |                                   |

\* Significant only at 0.05 level.

\*\* Significant at 0.01 level.

**(v) Study of relationship between the Scientific Awareness and the Scientific Attitude of Neo-literates**

It was felt that the awareness of scientific matters and phenomena might influence the scientific attitude of an individual, where one becomes open minded, free from superstitions, and develops a sense of judgement only after seeking evidences and so on. Based on this assumption, the relationship between both was studied by taking into consideration the pre- and post-test measures

obtained by neo-literates on scientific awareness test and scientific attitude scale, the results of which are presented in Table 5.

**Table 5 : Correlation between the scientific awareness and scientific attitude of neo-literates**

| Sample<br>(N = 65) | Scientific awareness |       | Scientific attitude |       | 'r' value |
|--------------------|----------------------|-------|---------------------|-------|-----------|
|                    | Mean                 | SD    | Mean                | SD    |           |
| Pre-test           | 33.18                | 14.40 | 61.12               | 12.74 | 0.15*     |
| Post-test          | 51.15                | 20.64 | 80.35               | 10.64 | 0.53**    |

\* The obtained 'r' value is not found significant even at 0.05 level.

\*\* The obtained 'r' value is found significant at 0.01 level.

Analysing the data obtained on pre-tests of scientific awareness and scientific attitude, it is found that a very low correlation exists between pre-scientific awareness and scientific attitude which is not significant, whereas the post-test analysis reveals that there is a significant relationship between scientific awareness and scientific attitude of neo-literates. This clearly indicates that the awareness developed on scientific matters and knowledge around through the scientific literacy programme has had an impact over the development of scientific attitude. Under many units, the cognitive inputs were accompanied by certain attitudinal inputs to remove blind beliefs, superstitions, and misconceptions. Sufficient opportunities were created to generate curiosity, open mindedness and critical thinking wherever it was necessary and feasible. Therefore, from the results, it may be inferred that the obtained scientific awareness has had an influence over the scientific attitude of neo-literates.

### Conclusion

The findings of the study serve as a proof for the effectiveness of Scientific Literacy curriculum which was evidenced through the increased scientific awareness and scientific attitude of neo-literates. One thing that is quite obvious from the study is that science need not be confined to the educated masses or to the formal institutions like schools and colleges alone. Science can be learnt by the rural population, even by illiterates and neo-literates, if taught informally through various activity-based, and discussion-oriented strategies, and using those media and approaches with which they are more comfortable. Literacy in science is extremely essential for rural people, not only to know their surroundings in the right perspective, but also to apply the knowledge of science in their lives, and to assert their rights as knowledgeable people in communicating and in decision-making processes in the world surrounding them.

**A. Mathew**

## **Sustaining Literacy in a Non-Literacy Milieu : PLC Experiences Warrant Change in Policy and Perception**

The major focus of this paper is to highlight some of the reasons which render the literacy pursuit far less effective today than what the TLCs (Total Literacy Campaigns), in the initial phase, promised to portend. Relevant in contexts like Dharmapuri PLC (Post Literacy Campaign) described in Section I, two sets of issues have received prominence in this paper. One, discussed in Section II, is the loss of priority to literacy, as compared to the initial stages of the literacy movement, and the consequent unenviable position of TLC/PLC in the overall socio-political milieu and in the agenda of district administration. This is irrespective of how well the objectives, operational strategies and organisational structures, management and monitoring systems are articulated, save in the cases of Collectors who have a personal commitment to literacy. The second but related set of issues, as examined in Section III, revolve around the so-called learner interest and disinterest perceptions. The different angularities of learner interest and disinterest perceptions as both the cause and effect of divergent understanding at policy and organiser levels about PLC objectives, are examined in detail.

One of the issues examined in this regard, is the organisers' discomfiture, in the policy context of literacy retention, consolidation and upgradation as PLC's major brief, about the perceived learner disinterest in literacy but overwhelming response to improvement-related learning and programmes. A related issue is the administrator-pedagogue perception that the entire gamut of activities to preserve the learning ambience, as secondary, and the organisers' moral dilemma, pointing to, in the organisers' view, a dissonance in NLM policy objectives and having demoralising ramifications. The plausibility of organisers taking umbrage under learner-interest related activities to gloss over a weak literacy base, on which PLC is super imposed, is also examined.

The other angularities or reasons for the perceived learner disinterest, discussed are : (i) whether the learner disinterest thesis is the organisers' alibi or a real enigma; (ii) the wisdom of expecting an organised system of learning without a durable institutional set up; (iii) whether the disinterest label is a slur on the learners; (iv) the quality of leadership, in situations of Collector's personal and intimate involvement and where the full timers have to slog it out almost alone and how these impinge upon learner response; (v) the correlation between the quality of full timers, their own commitment and leadership and learner interest; (vi) the wisdom of organisers' preference for awareness and improvement focus and deferring the literacy learning agenda

in the face of the seemingly inextricable nexus between economy and learner disinterest; and (vii) the effect on PLC where the backbone of illiteracy was not broken during the TLC phase.

The crux of this paper is two-fold : one, a critique of the policy perception of a PLC, low on literacy, but high on awareness and improvement emphasis, as unenviable, and the perception of learner disinterest as the major reason for rendering PLCs as ineffective; and two, also a critique of the organiser perception about the learner interest and disinterest phenomena. What is posited here, drawing from impressions gathered from visits to, and interactions with, people in different PLCs, is the plausible flaw in perceptions on both sides—policy makers, administrators and pedagogues, on the one hand, and organisers and learners, on the other. In respect of both the sides as well as in respect of both the issues, viz., learner interest and disinterest vis-a-vis a PLC with lesser focus on literacy and greater prominence to awareness and improvement thrust, a change in perception is argued, contending that both the issues are of dualistic nature, contentious but as one which cannot negate the other standpoint. In order to draw attention to the dualistic nature of both these aspects, learner interest and disinterest, and their different angularities are examined in detail. It is also argued that these conflicting perceptions underline the need for a change in policy, especially the expectations from and evaluation of PLCs. The last section, IV, recapitulates the issues and our perceptions about the reasons and remedies.

The notions presented in this paper are the impressions gained from visits to at least half a dozen PLCs across the country. The case of Dharmapuri PLC provides the immediate context and focus to the issues which are generic to the PLC scene in most cases. True, the Dharmapuri PLC scene lends substance and relevance to the issues discerned but it does not typify all the problems highlighted in this paper. Impressionistic accounts such as these cannot claim objectivity, for, it is based not on systematic and comprehensive study, but field visits and interactions with a cross-section of people in the district, including programme personnel.

### **Dharmapuri PLC, Tamil Nadu**

#### **Dharmapuri PLC's Major Features and Rationale**

The TLC phase in Dharmapuri was over on 31.12.1996 and PL activities were started from January 1997. In March 1997, the project was approved in principle with an ad hoc grant of Rs. 61.22 lakhs, and the final sanction was accorded in August 1997, for a target size of 4 lakh at a per learner cost of Rs. 42.77 (total cost of Rs. 3.42 crores) for two years.

The objectives set up by Dharmapuri PLC are on familiar lines so as to conform to NLM's PLC Guidelines, and include : (i) mopping up and remediation; (ii) retention, reinforcement, stabilisation and upgradation of literacy level; (iii) enabling neo-literates to apply literacy skills in their daily

life situations; (iv) use the communication skills for individual and group action; and (v) creating awareness about public policy and development programmes to improve their condition.

The four major thrust areas of Dharmapuri PLC, seen from the strategy, are literacy, awareness creation, organisation building and skill development. In respect of literacy learning, a great deal of emphasis has been laid, including a door-to-door survey, to get a clear idea of the target for mopping up and remediation (TLC backlog) and for consolidation and upgradation under PLC. The learning component has three-pronged thrusts : one, provision of learning materials and opportunities like PL-I Primer, supplementary materials like literacy walls, broadsheets, literacy weekly supplement in daily newspaper and a volunteer guided learning arrangement in PL centres; two, a campaign style drive to create reading interest and culture in rural areas among neo-literates and school dropouts; three, establishment of village libraries, almost one in each village/municipal panchayat and provision of learner interest/needs related books. The whole idea has been to provide adequate learning avenues to sustain and consolidate the literacy appeal.

The range of aspects sought to be brought under awareness creation is large, ranging from health education, legal literacy, Panchayati Raj, primary education, women empowerment, welfare and development programmes. In fact, both the range and strategy/implementation details spelt out about the awareness creation component easily makes it a favourite of PLC organisers.

Organisation building is a strategy calculated to subserve both literacy learning as well as awareness creation. Formation of literacy women groups was seen as an instrument of motivation, and as a guarantee to (i) sustain learner interest (in TLC itself, 1600 literacy women groups were formed, of which 600 were women's Self-Help [Thrift] Societies); and (ii) engender confidence, self and group identity, group solidarity and collective action for individual and collective improvement. Organisation creation is undoubtedly the most prominent focus of Dharmapuri PLC, to be consolidated and extended to cover every village and all learners.

For economic improvement, a wide range of skill upgradation, vocational and income generation activities were planned in the PLC calendar. And for quality of life improvement, stress was to be laid on primary education, especially for girls, women development, health education, legal literacy, awareness on Panchayati Raj, development and welfare programmes, policies, etc.

In terms of emphasis, as seen in Dharmapuri PLC proposal, women development cuts across all activities. A key variable in Dharmapuri PLC is the Plan to use the 'kalajatha' not only in PLC but also in all programmes which involve mass participation, as an instrument of motivation, mobilisation and participation. Another strong feature is the multi-tier training of literacy personnel and elected Panchayat members. Collaboration with different departments/agencies has been a significant facet of Dharmapuri PLC

especially in respect of activities and programmes which have a mutual implication.

Although sanctioned in March 1997, Dharmapuri PLC was yet to launch Mopping up operations for TLC left outs, by December 1997 and start PL-I transaction for neo-literates. Permission to utilise TLC balance for Mopping up was delayed. The supply of PL-I Primer for which printing order given to the Tamil Nadu Text Book Corporation was still to arrive in December 1997. Concurrent Evaluation and External Evaluation of TLC seem to have kept the organisers pre-occupied between May and September. However, since commencement mopping up and PL-I transaction got delayed, other activities were taken up immediately alongwith the changes in organisational strategy, structures and the roles and functions of full-time and part-time literacy workers.

### **Dharmapuri PLC Major Activities**

As part of the new strategy, one of the steps undertaken was the series of orientation training of literacy workers in the tasks of PLC. The second was the decision to start one model PL Centre/Cluster in each village/Municipal Panchayat-1250 in all-with the best VT of the TLC period, as the Panchayat Co-ordinator (PC). All the 1250 PCs were given training for the purpose, and all the PL centre activities, except PL-I transaction, were taken up.

In the last one year, Dharmapuri PLC's major activities included :

- formation of 1250 Arivoli Women Groups, of which more than 650 were/Self-Help Groups;
- winning co-operation from parents of Child Labour for their education in the Child Labour Special Schools;
- establishment of libraries in over 1250 village/town Panchayats with books for neo-literates as well as supply of dailies and weekly/monthly magazines;
- involvement of schools under the Anna Marumalarchi Scheme in the Arivoli Iyakkam;
- health awareness, especially the Cataract Free Zone campaign and the partnership with Health (District Blindness Control Board), TINIP, etc.
- enrollment drive for UEE in collaboration with DPEP;
- deployment of Women Coordinators for confidence and capacity building among Arivoli Women in the Self-Help Groups;
- preparation and training of block-wise cultural troupes, based on the success of the District Kalajatha Team in motivating VTs and learners to revive the literacy classes;
- introduction of a bimonthly magazine for neo-literates, "Nelli" and a weekly, "Arivoli Seithi Malar;" in the leading Tamil daily "Thina Tanthi;"
- the popular Joyful Learning programme for primary school children;
- "Chittukal Maiyyam," patterned after the Joyful Learning programme,

- for out-of-school children;
- Literacy Walls in every village/town Panchayats.

### **Organisational Approach**

The approach discernible in the nature and pace of activities deserves notice. The time involved in obtaining formal sanction for PLC and Mopping up operations, with its implications on funds availability or use of unspent TLC balance, could cause discontinuity in literacy workers' retention and deployment, resulting in suspension of literacy work and contact with the learners. Thus, keeping up the mass contact, sustaining their learning interest, and keeping low the financial implications appear the key to the nature of the programmes. Particularly noteworthy is the collaboration forged with other Departments/agencies, and the use of literacy volunteers and full/part-time literacy workers in their programmes addressed to the rural poor and women. The underlying perception is that when related to the learners' life, and anchored in the welfare and development activities of different departments or agencies, literacy has a greater chance of sustainability.

### **Roles and Functions of Literacy Personnel**

The personnel structure of Dharmapuri PLC include : District Project Co-ordinator (DPC-1); Central Project Coordinators (CPCs-5); Women Development Co-ordinators (WDCs-3); Block Project Co-ordinators (BPCs-18); Sub-Block Co-ordinators (SBCs-126); Panchayat Co-ordinators (PCs=1250) [part time]. The PCs are required to (i) organise and conduct one PL centre; guide VTs in his area; help in running PL centres and ensure weekly increase in Learners/neo-literates attendance; (ii) guide group discussions and decision-making; (iii) responsibility of the village library and maintenance of books and the village literacy wall; (iv) arrange village Panchayat members interaction in PL centres with neo-literates; and (v) submit to SBC, daily notes of activities, information about learners'/neo-literates' progress, besides supplying other information required by the ZSS.

The SBCs' tasks include : (i) supply village-wise learner list to PC and arrange new VTs where needed; (ii) prepare PCs' weekly activity timetable and help PCs in running PL centres and maintain weekly record of activities of PCs under his charge; (iii) intimate BPC about noteworthy cases of neo-literates, as observed in the centres, worthy of emulation/dissemination; (iv) report in the weekly SBC review meetings about problems, difficulties noticed in respect of PCs' activities, learners/neo-literates' learning progress and notable cases; (v) besides personal presence, ensure at least twice a week PL-I Primer learning by neo-literate women groups; (vi) in consultation with VLC members, make arrangements and organise prizes, felicitation and certificate distribution for learners and VTs; and (vii)organise monthly, at least one literacy function in each village.

The BPC's role as the main organiser at the Block level is clear from the list

of functions assigned to him. As a critical unit of literacy programme implementation with about 6-8 SBCs and 50-60 PCs in his area, the need for supervision, overseeing, reviews and overall monitoring, guidance and sorting out problems is unambiguously stated.

### **Monitoring and Review System**

As per the roles and functions laid down for different categories of literacy workers, a system of submitting weekly programme of activities to the next higher level is followed. Thus, an SBC would have the weekly timetable of all PCs, the BPC, of all his SBCs, and CPC, of all his BPCs. Besides being Conveners of one major function like EB, Training, Teaching-Learning (T-L), Materials, AIS, Women Development, etc., the CPCs are also responsible for all these functions in those blocks, assigned to them. At the block level, a CPC can get information about the weekly schedule of all the SBCs and the PCs. Besides the BPC, this information is also known to, and displayed at, the BDO office. Similarly, the system of sharing the weekly schedule of CPCs to the BPC, and through whom to the SBCs, and the PCs, also helps to know the CPC's visits and activities. This two-way information flow keeps the organisation informed of the activities of its personnel, facilitates upward information flow, and guidance from the leadership, while also facilitating verification and visits to any village by officials. The activities are monitored on a weekly basis at the block with the BDOs. This is how the BDOs appraise the Collector during the monthly review meeting on PLC activities in their areas. Through the DPC, the Collector also monitors the field programmes and the activities of literacy personnel.

### **Administration's Role in PLC Implementation**

The organisational structure in PLC, much like TLC, is a three-tier one, with administration, popular committees and full-timer set up. In actual practice, especially during PLC, however, the full-timer structure takes on the entire programme management. In sharp contrast to the TLC phase, when the Collector and the administration played the central role, in PLC, administration's role is one of facilitation. The gamut of PLC activities does not become the direct responsibility of administration. It is more in the nature of collaboration or partnership with the concerned departments/agencies when their programmes converge on PLC clientele (e.g., like UPE, health, nutrition, women development, etc.). The overall leadership of the Collector for the PLC programme enables collaboration of different departments. This way it could also be argued that administration has not absolved itself of its support to the literacy movement.

The numerous circulars to the BDOs from the Collector testify that the information about the weekly programme of literacy workers is intended to enable the BDO and other concerned block officials to facilitate, not merely supervise, the literacy workers' activities at the field level. From the interactions

with the villagers, as well as literacy workers, it appeared that the active interest taken by BDOs and other functionaries including the weekly review of literacy workers' activities by them, is not uniform everywhere. This situation is very unlikely if the entire administration is directly involved in the literacy work, i.e., if literacy is the central agenda of the administration. This is only one of the symptoms of many problems that affect not just Dharmapuri, but many other PLCs today. These are examined in the pages that follow.

In the initial phase of the literacy movement between 1990-94, there was a certain degree of importance attached to the literacy programme at official levels besides the high media attention. TLC performance was a point of reckoning and popularity within State administration, especially among the Collectors, and, within the district also, among senior district and block level officials. Performance in the literacy front today, is not a matter of reckoning either positive or negative, unlike performance in other short-lived schemes, the State Governments want to introduce for short-term political gains. Collectors, not being terribly excited about the literacy programme whether under TLC or PLC phase, could be perfectly normal. If demands are not exacting, and if there are certain personal commitments to literacy and quality of life of the poor, Collectors do not mind to devote some attention and a little time to TLC or PLC.

But, the extent of Collector's personal involvement and that of the administration could be two different things. The two critical factors accounting for translating personal commitment and involvement into that of the district administration and bringing literacy on the centre stage of administration's agenda are the personal interest of the Collector, and the Government priority for literacy. And with the kind of official importance and value attached to literacy lacking, it is only in rare cases that one could find Collectors continuing to give both personal attention and that of the administration to the literacy programme. In the involvement of the district administration and of the Collector, Dharmapuri PLC falls somewhere between the two, neither too deeply involved nor too indifferent.

The extent of involvement of the Collector and that of the administration have a direct bearing on the health and vibrancy of the literacy movement, especially in the PL phase. Drastic decline in learner interest and volunteers' idealism are not terribly different especially in the PL phase across the country, being more disheartening depending on the degree of literacy-poor milieu. The nature and outreach of programmes taken up under PLC, the extent of involvement of different departments in literacy programmes, or reflection of literacy in their own programmes, have all a bearing on the health and richness of PLC. That at the end of one year of PLC, the Mopping up operations as well as PL-I transactions are still to start tells its own story about the role of the district administration and the Collector in PLC in the case of Dharmapuri, and elsewhere. But at the same time, it could be contended that the range of unstructured learning opportunities provided in PL circles, besides the model

PL circle by the PC, and the constant attempts to bring in the new learners into the literacy fold are proofs of literacy being the central focus of all efforts. True, this cannot be denied. But, the question is to what extent (proportion) Dharmapuri PLC's proposed 8000 odd PL circles (for 4 lakhs neo-literates) are functional and how organised (not just the number but outreach) is the structured and unstructured learning activities, besides of course, the mopping up operations.

The profile or plight of PLCs today can be characterised by the (i) delays in commencement and, even when started, a palpable weakness in literacy learning; and (ii) the organiser dilemma of being right and/or guilty : right in perceiving the unstructured learning opportunities as well as awareness and improvement-oriented activities as being learner needs/interests resonant; and guilty of neglecting the literacy learning agenda, aside from the inadequacy, in effectiveness and outreach, of what they consider learner interest sustaining activities. This dilemma is reflected in many conflicting perceptions, as analysed in the next section.

### **LEARNER DISINTEREST—THE HAUNTING SYNDROME OF PLC**

#### **(i) Learner Disinterest : Organisers' Enigma or Alibi**

One major issue bedeviling PLC has always been the reported learner disinterest. This has been the case even during TLC. But in TLC, the literacy attraction is new and is hyped further by creation of Literacy positive climate which exercises a kind of psychological pressure on non-literates and moral pressure on the educated to participate in TLC and the deployment of administration especially the line departments, in the management of logistics and supervision. The large-scale social mobilisation these efforts manage to create helps in keeping up the momentum and tempo and that accounts for TLCs' success, in whatever number of people made literate.

In PLC, however, even if the organisers try desperately to sustain the momentum of a campaign, it does not pick up. Even with the best of the TLC team, PLC marks a climb down, a wearing down of excitement and it inexorably changes from a campaign into a subdued programme. The reasons are many, the most important being the more complex character of PLC and the consequent unfeasibility of doing PLC in a campaign mode, though not realised at the policy level. Officially supplied statistics is hardly reflective of the field situation. Even on record, PLCs have rarely managed to find more than a fourth of its TLC clientele participating regularly. With the attraction of literacy worn down, and with neo-literates looking for immediate and tangible gains of literacy, they begin to withdraw from PLC activities which do not hold out these gains. This perception is very common and almost the accepted notion about the profile of PLCs in India, in respect of neo-literates participation.

But there is a catch here. The learner disinterest issue is the most tricky and ticklish problem. The learners who come to the centre do so not for literacy, but for information, knowledge, skills upgradation or vocational training, with the hope that these would help them to improve their condition. But when literacy abilities are camouflaged by the organisers under activities for improving neo-literates' capacity to use information, knowledge, skills and other learning avenues, the learner disinterest is seen to be surmountable. It depends on the organisers' skills to keep the literacy agenda in mind while providing a broad spectrum of 'learning opportunities.' It is possible, but requires Herculean efforts to preserve, nurture and upgrade literacy learning levels through the myriad forms of learners utility-perceived learning activities.

It is also equally plausible that PLC is super imposed on a weak TLC, often as desperate attempt to net the unmotivated ones. There is another angle to the issue of learner disinterest in mere literacy and the organisers' attitude about having to camouflage literacy under learner-utility perceived activities, to give a chance for literacy's survival. However, what is not candidly admitted is the hopelessly weak literacy basis on which the PLC's literacy reinforcement, continuation and upgradation thrust are super imposed. If the majority of the non-literates transit from TLC to PLC as leftouts, dropouts and semi-literates, it is but natural for them to shy away from PLC activities in respect of literacy learning and show interest in awareness, functionality and improvement-oriented activities. Underplaying the need for a huge mopping up as its brief, and being populist about learner-interest-oriented activities, is neither being loyal to the literacy cause nor honest with the administration.

### **(ii) Anomaly in Policy Perception and Organiser Dilemma**

There is a certain dualism in respect of neo-literates' responses to, and participation in, PLC which is easy to misread. It is easy for pedagogues and administrators to pin down the lack of proper and immediate follow up by systematic and adequate learning arrangements as the *raison d'être* of learner disinterest and large scale regression, implying thereby that both could be obviated by ensuring proper academic planning and T-L transaction arrangements. This argument does not find favour with the organisers and the same would seem to hold good in respect of neo-literates' response too.

But at the same time, for pedagogues and administrators to believe that this learning desire could be translated or converted into literacy learning, and to a self-reliant level, and to stipulate such expectations as the yardstick of a PLC performance would be self-delusion. For, given the extremely uneven levels of even the fragile level of literacy at the end of the TLC, with all the phenomenal effort, it looks almost impossible that one could force the learners into literacy learning in the PL phase, even during the PL-I period, when structured and guided learning is envisaged. This could be done only for a very small minority of neo-literates—highly motivated and generally in the 15-25 age group. But for the majority, the main concern is 'use literacy' ability, and uses of literacy,

which the organisers hold as the life nerve of a vibrant PLC, but in the eyes of policy makers and pedagogues, are organiser excuses for failure in the literacy front.

There is also a reason why literacy learning takes a back seat. When Primer supply or NLM sanction for taking up mopping up operations get delayed, out of utter sincerity and anxiety to keep the contact with learners, organisers resort to link literacy with group formation, group learning and solidarity building programmes. What else can they do in case of delay in sanction from NLM side or primer supply by the printing agencies, a State agency—the TNTB Corporation, in the case of Dharmapuri, in respect of which it is difficult to force the pace, and much less, can do anything when deadlines are not met. While other programmes dependent on State agencies, facing similar delays languish, at least in respect of the literacy programme, there has been an attempt at damage control, keeping up the contact with the learners, keeping alive the learning desire and through activities like awareness, organisation, group learning and link literacy programmes, demonstrate more tellingly the need for literacy learning. The range of activities undertaken in Dharmapuri since January 1997 has a telling relationship with preserving the learning ambience which if lost for lack of contact, would be more difficult to revive than starting TLC afresh.

It is all very well to talk about TLC classes going on daily and PL centres meeting once a week. In PLCs not having started that way, and where provision of unstructured learning opportunities is seen critical to retain contact with learners, literacy teaching inevitably takes a back seat. Whether honest to admit or not, PLCs are having to grapple with this problem; the prominence of learner interest and group solidarity activities on which active PLCs perch themselves and flourish, testifies to the ready dilemma on hand. While PLC organisers do not deny the discomfiture in the literacy learning issue getting pushed back, in the face of overwhelming signal of neo-literates' response to only uses of literacy related activities, they do not seem to have a ready solution to surmount this issue.

### **(iii) PLC : A System Without an Institutional Set Up?**

An issue which has serious implication to policy, performance audit (evaluation) and strategy needs to be addressed in the context of the perception of learner disinterest and the consequent question of an ideal PLC strategy. PLCs are envisaged to provide for structured (volunteer assisted and primer based) learning for the first cycle of 6 months and volunteer guided but unstructured learning for the remaining three cycles of 18 months.

The issue is whether PLC, given the practice of a weekly meeting system, can approximate to an institutionalised system like the formal education set up. While the first 6 months are stipulated as adequate to complete PL-I, leaving flexible the frequency of centre attendance, weekly visits to the learning centre is the norm prescribed for the unstructured learning phase of 18 months.

Moreover, there is no regular place provided; it is left 'flexible': The 'learning centre' could be anywhere—under a tree or a street light, the panchayat house/ community hall, a school room/verandah, a learner/VT house. In effect, there is no regular place giving it an institutionalised set up. PL groups often have no place either for themselves or in the conscience of administration and civil society!

To expect an organised learning activity without an organised set up and a durable institutional network, with all the indifference that literacy pursuit has to endure, would be inconsistent and anomalous.

**(iv) 'Learner Disinterest' : Myth and Slur on Non-Literates**

Learner disinterest needs to be viewed, not a priori, but in certain contexts. For instance, is the learner disinterest in literacy per se and their reported overwhelming response to it when learning avenues are anchored around life concerns, a real representation of the learners' standpoint? If literacy learning and other unstructured learning avenues are provided efficiently during PLC, in continuation and in the same spirit as in TLC, and then if the learners continue to elude, then the organisers' perception about learner disinterest could be legitimate. With the TLC experience behind, learners interest sustenance could ill-afford deficiency and delay in organisational and planning spade work like EB, Survey, Training, T-L material production or procurement and distribution and of course, the new organisational strategy. But delay and deficiency are precisely what happen in PLCs.

Given the delays in sanction, receipt of funds, preparations and take off, PLC takes not only long to get going, but when it does, seems more like a routine programme, shorn of all excitement and hectic pace seen during the TLC phase, all of which adversely affect learner interest. Also, provision of varied learning activities, efficiently planned and effectively reached to all learners, and the enthusiastic participation by learners, remains an enigma of literacy organisers. Equally elusive is the involvement of different wings of administration, Semi-Government functionaries and elected members of village and town panchayats. Therefore, any generalisation about learner disinterest can be tenable only in the context of these three features.

Also, there is no dichotomy if learners in PLC expect the uses and gains of literacy, tangible and immediate—the plank on which the campaign for literacy was canvassed. Awareness and organisation assume major importance as deferred objectives. Literacy learning is one leg, the other is represented by improvement-oriented activities. PLC, which rests only on one leg, is lame and can only limp. It is through the multifarious activities under these unstructured learning avenues that the literacy learning ambience is to be nurtured and preserved. But without providing the literacy learning avenues properly and systematically, there is no legitimacy in moaning about learner disinterest. First is the failure of the basics, systematic and adequate provision of literacy learning, and second is the failure of effectively combining literacy

around life concerns of the neo-literates. If after this, learner disinterest remains as the main hurdle, organiser perception could be valid. Most PLCs, Dharmapuri PLC is no exception, trade off the one—awareness and improvement thrust—for the other—literacy.

Seasonality factors have their toll everywhere on learners' participation in literacy programmes. And the unusually heavy rains during the monsoon, incessant for more than a week, left Dharmapuri PLC, much like elsewhere in Tamil Nadu, gasping for learner participation in the centres. In the three days we stayed there in December, it was with great difficulty that we could reach information to villages, or keep the time intimated for the visit. In the 5 villages visited on two days, the learner turnouts were understandably low, and literacy could hardly be an attraction to endure all the mud and slush in the village, when it rains heavily with no proper place to sit around. PL centres function without any place of their own. A panchayat house room, or the small room of the village library, the verandah or house of a learner, volunteer or some literacy sympathizer, or simply a spot under a street light cannot be a convenient place for study. It really does not make it comfortable to be on the mercy of others all the time. Yet PLC goes on and learners do come with patience. Learner disinterest is a myth and a slur on learners.

In one case, the PL centres and Women Self-Help Groups in two villages that we visited appeared to have kept the literacy learning agenda in tact. Members of PL centres and Self-Help Groups read out the primers well and participated in group learning activities like story reading, reciting proverbs, riddles, etc. Their attention and comprehension of the story and its details were amazing. This was indicative of the effectiveness of TLC, supply and effective use of unstructured learning materials during PLC as well as the success of literacy being kept as the central focus of PLC activities.

In another case, in two other villages, the concern for literacy learning, and the literacy environment seemed to take a back seat; and Government loans, income generation activities seemed to dominate their concern. Although the basic attraction to the PL centre and Self-Help Groups is the desire for improving their condition, in a group of 15-20 women members in a PL centre or women self-help group, with just 2-4 neo-literates, and the remaining being semi-literates or new learners, the primary task was to guide them to basic literacy. Even group learning through news reading, story telling, could help preserve the learning ambience.

The poor look to improvement from any quarter, and if it comes under the aegis of PLC, not as a condition to literacy acquisition, but as a stimulus for it, there is no reason why they would boycott PL centres. The learners may not perceive literacy as their first need, but improvement. It is for the organisers to negotiate the primary and the secondary agendas rather than put the onus of 'interest' on the learners.

#### **(v) Poverty of Leadership and Learner Disinterest**

The leadership of a literacy programme in a District of which the Collector

is the leader and the ZSS is under his chairmanship, cannot be anything other than what the Collector wants. The quality of the programme reflects the quality of the Collector's leadership, commitment and efficiency in programme planning and implementation. In the case of a Collector who makes literacy as a central agenda of district administration, takes direct control of the programme, commandeers personally, involving the different wings of administration and the full-timers, coalesces the three-tier organisational and management structure, with full-timers, representative literacy committees and administration, and co-ordinates the programme under personal review, the quality of the programme is the best.

A second case, under which many programmes in the southern States fall, is one where a large number of full-timers from the ranks of educated unemployed, work as a team under the overall supervision of the Collector. District administration, its entire rank and file, under different wings, is not directly involved, save the development wing headed by the BDOs. The co-operation of the concerned department is solicited as and when needed, but basically it is the full-timer team which manages the programme within broad guidelines endorsed by the Collector. The DC and the ZSS-EC control leaves enough leeway for the full-timers to design programmes, save those awaiting NLM sanction or primer printing, T-L material acquisition, etc. In this case, the quality of leadership is of both; lesser the Collector intervention or direct control, the greater the reflection of full-timers' quality, commitment, dedication and efficiency. Even administration's co-operation is a factor influenced by the resourcefulness and track record of service of the full-timers. The nature of the programmes offered in a PLC can be traced to their initiatives. How good is the ground level situation is also a reflection of the leadership provided by the full-timers, whether they go it alone or with different wings of Government and Semi-Government departments/agencies.

The literacy poor milieu is uniform everywhere. But the variation in learner interest, response and participation in the different blocks is due perhaps, to the difference in degree of leadership and hard work put in by the CPCs. If they lead from the front, then the BPCs, SBCs and PCs function in a similar way. Permissiveness at the top cannot beget exacting performance from below. If the CPC visits like officials, collecting statistics of work done by those below, she is sure to get a lot of results reported without much work done at the ground level.

#### **(vi) Mystery of 'Learner Interest'**

Learner disinterest, it must be noted, should be traced to different reasons. One may be a relenting of the contact, almost like a moral and psychological pressure during TLC, with learners. If such contact was not there during TLC, then it should be more a question of campaign deficiency, rationalised by the organisers than the literacy poor milieu, learners' poverty, etc. For, in literacy poor milieu characterized by learners poverty, the urge for improving their lot

would be so overpowering that learners' disinterest would be unthinkable. It is then more a question of pre-conditioning improvement-oriented programmes along lines that would appeal to the learners. The approach would be group learning, group solidarity, self-confidence, articulation and communication skill development. The content of the learning message would go beyond to issues impinging on the lives of learners, including cultural, social, educational, health and other aspects of quality of life. Vocational slant, skill upgradation, training, formation of learners co-operatives or collectives around an economic/income generation activity or Thrift Societies would truly resonate learners' immediate and instinctive demand. It needs maturity and it takes time to convince them that economic factors cannot be the lasting foundation on which literacy could be built. Similarly, the frail literacy plank alone cannot take on the huge load of economic improvement of the learners, given their expectations of a dramatic improvement. In fact, it would be even more prudent to convince them that improvement in quality of life provides a more enduring foundation to build literacy with greater returns.

#### **(vii) Deferred Literacy is Perennial TLC**

The number of learners enrolled, completed Primers and still learning that one finds in the MPRs are for the record : no PLC district would like to be labelled as an under-achiever, and after all why invite the financial wrath of Government, Central or State. But irrespective of the figures reported, most PLCs, Dharmapuri is an eminent case in point, end up having to carry the cross of a huge back log. So much so, notwithstanding the numerous activities which are essentially addressed to the neo-literates, there is no hiding the fact that the bridge building and learner contact-oriented activities have a sharper edge as attracting new learners to learn basic literacy rather than attract neo-literates to stabilise, consolidate and improve their fragile literacy.

The reasons may be varied but the failure to break the back of illiteracy in the TLC stage leaves huge backlog for mopping up in PLC. This may, in fact, posit an imperative change in the approach towards basic literacy itself. Activities of unstructured learning under awareness creation and organisation of neo-literates for improvement as have positive bearing in attracting new learners, may well start during TLC itself. Otherwise, TLC tasks of basic literacy, at this rate will go on endlessly and for the record, and of course for programme sanction and funds, one would have CE too come on stage. Exaggerated returns of numbers made literate, self-reliant in literacy and the like would be exploded when the next Census comes. It would be uncharitable to single out Dharmapuri as an exception to the rule. Durg, Pune, Dakshin Kannada, Ganjam, Nellore, West Godavari, Ajmer and Moradabad—districts with a distinguished name in TLC have been no different. In this matter, whatever the records and claims, our personal observation at ground level shows this trend.

In its adult education experience over the last 50 years, perception of need for a campaign approach to eradication of adult illiteracy is not new in India.

But for various reasons, the campaign approach had not come on centre stage till the advent of the TLCs in 1989-90. What is innovative about the campaign approach in India is the adoption of a people's movement character, even when spearheaded, funded and directed by the Government/district administration and implemented in a milieu in stark contrast to the revolutionary or transformative contexts in which similar campaigns were located elsewhere. The gains have been substantial. The experience of Dharmapuri PLC provides the immediate context and has helped to lend substance and poignance to the issues.

One of the reasons why PLC strategies of mopping up, remediation and consolidation and upgradation of literacy learning get delayed and underplayed, as compared to awareness, organisation building and improvement activities, relates partly to the delay in sanction by NLM, supply of primers by printing agencies, and/or planning infirmities by the ZSS.

Another relates to the metamorphosis characterising the literacy movement: the loss of excitement with the inexorable change of a campaign into a programme between TLC and PLC; the inherently greater complexity of PLC, of successfully balancing the trinity of PLC objectives, unlike the all pervasive literacy focus in TLC; and the resultant unenviable position of PLC, getting further accentuated by the radical decline in administration's priority for the literacy programme as seen during the TLC phase. The need for a drastic change is more critical and acute in respect of policy, in the context of PLC objectives, which values efforts, its outreach and effectiveness in respect of all the three objectives of PLC, rather than only literacy learning. The PLC scene today would seem to cry aloud for a change in policy which values and fosters adults learning on issues of vital interest.

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### References

- Acharya, Promesh, "Sustaining Literacy and Community Empowerment," paper presented in National Seminar on Current Issues in Adult Education (17-19 March, 1997), NIEPA, New Delhi.
- Athreya, Venkatesh and Chunkath, Sheela Rani, *Literacy and Empowerment*, Sage Publications, New Delhi, 1996.
- Bordia, Anil, "An Agenda for Adult Education Research—The South Asian Perspective," *International Journal of University Adult Education*, Vol. XXXV, No. 3, 1996, pp. 8-20.
- Chatterjee, Bhaskar, "Strategies for Post-Literacy in the Next Decade" (Zakir Hussain Memorial Lecture), *Indian Journal of Adult Education*, Jan.-March 1996, pp. 27-45.

- Evaluation of Literacy Campaign in India : Report of Expert Group, NLM, MHRD, GOI, New Delhi, n.d.*
- Ghosh, Avik, "Adult Education : Looking Beyond Literacy Campaigns," *Economic and Political Weekly*, Dec. 20, 1997, pp. 3246-48.
- "Guidelines for Post-Literacy Campaign : A Summary" *Literacy Mission*, October, 1994, pp. 12-18.
- Mathew, A., " 'Conclude You May : We Will Continue Learning' : A Leaf Out of Pune PLC and An Issue for CE," *Indian Journal of Adult Education*, Vol. 56, No. 2, April-June 1995, pp. 24-36.
- ., "Continuing Education in Dakshin Kannada : Literacy Learning Vs Improvement Dilemma," *Literacy Mission*, Nov. 1995, pp. 8-14; Dec. 1995, pp. 17-23; Jan. 1996, pp. 24-31.
- ., "Adult Literacy and Skill Development : Indian Experience," *Literacy Mission*, Vol. XIX, No. 1, Jan.-Feb. 1995, pp. 14-19.
- ., and Rao, C.K. Mohan, "Divergent Perceptions of Literacy Campaigns : Towards a Balanced View," *Mainstream*, Jan. 22, 1994, pp. 15-23.
- "Post-Literacy Strategy," *Literacy Mission*, Dec. 1993, pp. 23-26.
- Premchand and Mathew, A., " 'Fourth Battle of Panipat' : Total Literacy Campaign in Haryana," *Economic and Political Weekly*, Oct. 2, 1993, pp. 2112-15.

Sita Vanka

## **Attitudinal Development among Women through Adult Education—A Comparative Study in Andhra Pradesh**

In the modern world which is characterised by a vast array of human achievements in diverse fields of knowledge and action, the instrumentality of education as the prime mover of change and development has been established. This assumes significance in view of the redefined goals of development "as widening of people's choices" and consequently, the initiation of concrete efforts to bring back "people" at the centre of development "to build a new people's world order," (Human Development Report, 1990). Successive Human Development Reports (HDR) addressed and examined different human development issues but the HDR, 1995, cautioned the world in a simple but far-reaching message... "Human Development, if not engendered is endangered." (HDR, 1995). This brings us to the special role the women are expected to play in the next millennium as equal partners in the process of national development. A meaningful participation in development, however, presupposes "acquisition of knowledge or literacy" and has been rightly included as one of the Human Development Indicators (HDR, 1990). Among these development indicators, the position of "literacy" in India is particularly grim. Though the percentage of literacy has risen over the years from 16.67 in 1951 to 52.11 in 1991, the reality with regard to women's education reflects an alarming situation.

Education for women assumes significance for two reasons. It is not only a means to achieve development and fulfil other development goals, but also an important aspect for women's development itself. Second, education, as an instrument of social change and transformation, leads to a better perception of self and brings about attitudinal changes, thus leading to the "empowerment" of women. These facts, therefore, compel a special focus on women.

### **The Indian Experience**

Efforts to tackle the problem of women's literacy were attempted half-heartedly by both the Centre and the States, till the first structurally serious nationwide programme of adult education, was launched on October, 2, 1978 in the name of the National Adult Education Programme (NAEP) (NAEP—An Outline, 1979). But the programme has not been effective as was expected. (Review Committee, 1980). The National Policy on Education, 1986, reiterated

the importance of women's education in a separate section entitled "Education for Women's Equality" (NPE, 1986). The "Mission Approach" (1988) and the current "Total Literacy Campaign" which is in operation in 336 out of the 448 districts in 20 States and 4 Union Territories aims at achieving total literacy by 2005. It is, thus, evident that name plates were changed overnight to suit the powers to be, with the result that although the literacy level has risen over the years, the absolute number of women illiterates had risen alarmingly from 182.91 million in 1981 to 200.53 in 1991. (Census of India, 1991). The facts that the women illiterates constituted more than 60 per cent of the total illiterate population, 193 districts in India have a female literacy rate of less than 20 per cent and the coverage of women through adult education centres is only around 41 per cent show the acute situation. (Census of India, 1991). Moreover, the rural and urban situations and regional variations compound the problem.

Andhra Pradesh, with a female literacy rate of 32.72 per cent, presents an equally challenging situation. It is the least literate State among the southern States, and also had a very slow growth rate in female literacy. The Hyderabad District, in spite of having the capital located here and having access to educational opportunities, still has a vast percentage of female illiterates—37.44 per cent (Education For All - The A.P. Scene, 1994). Realising the gravity of the situation and following the policy directive, the State of Andhra Pradesh is taking an active part in the eradication of illiteracy through the TLC approach, which is in operation in 22 out of 23 districts in the State. Research, therefore, becomes imperative to provide the much needed feedback to the programme implementators/ policy makers.

Evaluation research dominates the field of adult education research (Patel, 1994). The Government commissioned about 88 evaluation studies, (see, Directorate of Adult Education, for a review) of which only 2 focus specifically on women (Dighe and Patel, 1993). Gender issues in adult education have thus remained as marginal areas of enquiry (Patel, 1996). Moreover, the scanty literature included women in the sample, but no serious effort was made to understand the extent and nature of the participation (Patel, 1996) and the attitudinal development through their exposure to adult education, appears totally neglected (Puri & Kaur, 1997).

The present paper seeks to highlight the attitudinal development among women exposed to the adult education programme, as implemented by three major implementing agencies in the Hyderabad District—The Government, the Osmania University's "Centre for Adult, Continuing Education and Extension" (CACE&E) and an NGO-Mahila Rights Protection Unit (MARPU).

A total of 613 women learners who completed the course 210, 177 and 226 from about 70 AECs—distributed among the Government, CACE&E and MARPU respectively, were contacted. A schedule to cover their personal-social background along with their opinions and perceptions on issues, connected with the programme—value of education, health awareness, importance of cleanliness, women's empowerment, knowledge about the AEC, self-

confidence, purpose, content and practical usage in their daily life, the learning material, their opinions about the Supervisor, Instructor, community attitudes and the like was administered to each of the respondents. The responses were analysed in terms of contents and presented in a descriptive way, limiting the statistical treatment to frequency and mean scores.

## **RESPONSES AND REACTIONS**

The responses are presented under two heads : Personal-Social background and their Opinions and Perceptions.

### **(1) Personal -Social Data**

The personal-social data of the learners reveals that the sampled women learners belonged to the target group in terms of age (15-35); caste/category and were predominantly engaged in casual labour and business/petty trades. Majority of them did not have any previous schooling before enrolling themselves as learners in the AECs organised by all the three agencies.

### **(2) Opinions and Perceptions**

Adult education presupposes adequate publicity in the concerned area prior to its implementation. Enquiries from the sampled learners revealed that the Instructor was instrumental in informing a majority of them, (179 and 156) followed by the supervisor and the local leaders in the Government and the CACE and E. The women in MARPU Centres were reportedly contacted by the field functionaries individually and after a series of meetings, the AECs started functioning. This shows that the participation of women in organising the AECs was found to be negligible and that the AECs were organised by the respective agencies and the participation of learners was unilaterally decided by the agencies concerned.

A favourable opinion was observed in their responses towards the purpose of the programme. 94 per cent in the Government, 12 per cent in the CACE&E and 96 per cent MARPU, opined that the programme aimed at the eradication of illiteracy and a consequent improvement in their standard of living. They valued literacy as their liberator, leading to self-reliance and empowerment. However, their perceptions on the content of the programme and the instruction at the AEC, appeared as though they have equated "adult education" with the acquisition of literacy skills alone. 95 per cent of the sampled learners in the Government, 92 per cent in the CACE&E and 56 per cent in MARPU, have indicated reading and writing skills alone as the contents of the AEP. 44 per cent of the learners in MARPU, gave a balanced weightage to the three components in the programme content.

A majority of the learners indicated their ability to read and write (186, 152 and 216 in Government, CACE&E and MARPU respectively) as major benefits, followed by gaining knowledge about nutrition, health, child care, prenatal

and postnatal care etc. (28, 24 and 52 respectively in the Government, CACE&E and MARPU). The responses clearly indicated that their perceptions of the content of the programme influenced their perceptions of its benefits and the practical usage in daily life in the three agencies.

**Table I**  
**Perceptions of Sampled Learners on the Relevance of Knowledge Gained at the AEC in their Daily Life in the Three Agencies**

| <i>Sl. No. Perceived uses of knowledge</i>   | <i>Government</i> | <i>CACE&amp;E</i> | <i>MARPU</i>  | <i>Total</i>  |
|--|-------------------|-------------------|---------------|---------------|
| 1. Reading and writing   | 186<br>(88.2)     | 152<br>(85.8)     | 216<br>(95.5) | 554<br>(90.3) |
| 2. Gain knowledge about work   | 12<br>(5.7)       | 16<br>(9.0)       | 48<br>(21.2)  | 76<br>(12.3)  |
| 3. Develop in life   | 7<br>(3.9)        | 8<br>(4.5)        | 42<br>(18.5)  | 57<br>(9.2)   |
| 4. Acquire knowledge about nutrition, health care, immunisation, prenatal and postnatal care, etc. | 28<br>(13.3)      | 24<br>(13.5)      | 52<br>(23.0)  | 104<br>(16.9) |
| 5. Others (sign, read bus boards, cinema names, advertisements, government programmes etc.)        | 19<br>(9.0)       | 14<br>(7.9)       | 29<br>(12.8)  | 62<br>(10.1)  |

Responses provide for multiple answers and hence the total does not add up to 100 per cent. Figures in parentheses indicate percentages.

Small family norm appeared to have found support from a majority of the women, (79 per cent, 68 per cent and 92 per cent respectively) but a considerable number of female learners—72 per cent, 64 per cent and 68 per cent in the Government, CACE&E and MARPU—still considered life to be “useless” in the absence of a son. This attitude appeared to have influenced the belief regarding a son as a source of support during old age and crisis, universally among all the three agencies in the same proportion. Knowledge with regard to the legal and other rights of women was found to be a relatively new phenomenon in both Government and CACE&E run AECs, (31 per cent and 29 per cent) whereas the MARPU learners could demonstrate an average knowledge of the rights of women—(56 per cent). This lack of knowledge appears to have a bearing on their role in decision-making skills too. Women unequivocally accepted that decision-making in the family is a male function and that the reservation for women in the local, State and national levels should be delayed for some more time (83 per cent for all the 3 agencies). All the same, they demanded the right to vote and appeared to be quite conscious of their choice.

Interesting and need-based curriculum promotes the desire to learn, thereby leading to attitudinal changes among women. Enquiries indicated a satisfactory

response with regard to the adequate and timely supply of learning material in all the agencies. However, the learners from the Government and the CACE & E complained that the curriculum was beyond their comprehension (28 per cent and 32 per cent respectively), too long a syllabus (22 per cent and 24 per cent respectively) irrelevant topics (28 per cent and 38 per cent respectively) and inadequate teaching (8 per cent and 4 per cent). The women learners in MARPU (64 per cent) reported satisfaction over the learning kits and also the method of distributing the material after stages of evaluation by the Instructor.

The Instructor is the chief motivator of the learners. It is encouraging to note that a majority of women (56 per cent in Government, 61 per cent in the CACE&E and 79 per cent MARPU) maintained a favourable opinion about their Instructor. The Instructor reportedly encouraged them; provided a "role" model; inspired them, but for some she/he did her/his "duty" or taught monotonously. However, majority of them could not interact with the Supervisor in the Government and the CACE&E (86 per cent and 72 per cent respectively) in contrast to the frequent interaction the MARPU learners reportedly had with their Supervisor (89 per cent), who discussed their problems; took classes in time and accompanied them on trips.

Adult education, depends on a variety of factors which influences the participation and attitudinal development of a women learner. Psychologists generally believe that the attitude of the community on the "learner" bears less influence compared to the perception of the community attitudes by the learners on most occasions. The sampled learners perceived the community attitudes over their learning positively in all the 3 agencies (60 per cent in Government, 71 per cent in the CACE&E and 82 per cent MARPU) and reported that they had faced no discouragement either from their households or their neighbours. The rest, however, expressed their own reservations and did not elaborate, when probed further. The results indicate that women have started to appreciate the fact that age or sex cannot hinder their learning process (Puri and Kaur). Their confidence in organising themselves for demanding their due share from the welfare programmes bears evidence to the atmosphere of change taking shape from three R's to empowerment—of course deriving inspiration from one of the most powerful anti-arack "movement in the State" (Pillai, 1997).

The rich experience of the women learner can be understood in the valuable suggestions offered for the better implementation of the programme and participation of women in the programme (Table II).

### **Conclusion**

The personal-social background of the women attending the AECs satisfied the programme requirements in all the three agencies.

The learners came to know about the AEC through the Instructor, but mere jotting down the names of the eligible adult women does not guarantee their participation as is evident in the Government and the CACE&E (Evaluations,

1989). Publicity and awareness campaigns and mobilisation of interested learners has created a "demand" for adult education and has contributed to their whole-hearted participation and the consequent attitudinal development among the MARPU women. This is more so with women, who seek education at a point when its meaning and value makes little difference to them. A comprehensive survey undertaken by an individual or agency, should precede the launching of the programme for their participation and attitudinal development.

**Table II**  
**Suggestions Offered by the Sampled Learners in the Three Agencies**

| <i>Sl. No</i> | <i>Suggestions offered</i>  | <i>Government</i> | <i>CACE&amp;E</i> | <i>MARPU</i> | <i>Total</i>  |
|---------------|---|-------------------|-------------------|--------------|---------------|
| 1.            | Better facilities   | 161<br>(76.4)     | 148<br>(83.6)     | 42<br>(18.5) | 351<br>(57.2) |
| 2.            | Interesting teaching  | 78<br>(37.1)      | 49<br>(27.6)      | 26<br>(11.5) | 153<br>(24.9) |
| 3.            | Interesting content   | 68<br>(32.3)      | 62<br>(35.0)      | 24<br>(10.6) | 151<br>(25.1) |
| 4.            | Official interest   | 32<br>(15.2)      | 42<br>(23.7)      | 12<br>(5.3)  | 86<br>(14.0)  |
| 5.            | Teaching a vocation   | 98<br>(46.6)      | 79<br>(44.6)      | 89<br>(39.3) | 266<br>(43.3) |
| 6.            | Others (good location, encouragement, women related issues, etc.) | 42<br>(20.0)      | 39<br>(22.0)      | 49<br>(21.6) | 130<br>(21.2) |

Responses provide for multiple answers and hence the total does not add up to 100 per cent. Figures in parentheses indicate percentages.

Absence of proper environment building has also affected the learners' perceptions of the purpose and content of the programme and limited its benefits to the acquisition of "literacy" skills alone (Ahmad, 1997). The responses clearly indicate that the situation is not truly reflective of the Instructor's lapses alone, who really represents the "non-formal" component of the organisational set-up, but points to the ineffective supervision and negligence of the higher officials, who conveniently "pass the buck" and evade accountability.

Though they appeared to be more awakened and demonstrated positive attitudes on some issues (Small family norm, child care, good health habits, right to vote etc.), their deep-rooted traditional beliefs portray their firm convictions because of which they are unable to shed their negative thinking on some issues. Adult education movements should offer vital inputs to bring about the desired change in the attitudes and perceptions of women, without which the "empowerment" and the consequent "development" phenomenon, the world is debating about, become meaningless.

Irrelevant learning material, uninteresting curriculum, and inefficient

practices demotivated the women and perpetuated their cynicism. The practice of passing on the entire learning kit to the women, frightened them. Moreover, to expect an "adult" to carry the kit daily to the AEC, also embarrasses the adult women. The possibility of passing the learning material, as and when required, upholds the sentiments and inhibitions of women, at the same time, saving the programme cost (of replacing the lost kit). Besides, the contents of the learning material must include success stories of women and related issues with an underlying message of changing their attitudes and empowering them.

The comparative performance of the agencies reveals that the NGO-MARPU—has emerged as the single agency to have brought the desired change in the attitudes of women with a 'poor' and 'average' performance by the Government and the CACE&E respectively. The efforts of the voluntary agencies should be carefully studied for possible inputs into the Government sponsored programme. (Ramabrahmam, 1988). Moreover, the concepts of "literacy" and "development" have changed in recent years. It is not only the ability to decipher the alphabet but leading to a better life. Development implies "Human resource development" and an "engendered" human development paradigm conditions the equal participation of women in development. Adult education for women, therefore, must entail attitudinal development leading to "empowerment" of women through "Education For All and Forever."

### References

- Ahmad, Nasim, "Benefits of Literacy and Learning," *Literacy Mission*, Vol. XXI (1-4), 1997, pp. 18-22.
- Census of India (1991).
- Dighe, Anita and Patel, Ila, "Gender Equity in Literacy in India : Some Issues," *Perspectives in Education*. Vol. 9(1), 1993, pp.3-14.
- Education For All—The A.P. Scene*, Hyderabad : Department of Education, Government of Andhra Pradesh, 1994.
- Evaluation of Literacy Campaigns in India—Report of Expert Group, New Delhi, Directorate of Adult Education, 1994.
- Human Development Report*, UNDP, New Delhi, 1990.
- Human Development Report*, UNDP, New Delhi, 1995.
- NAEP-An Outline*, New Delhi, Ministry of Education and Social Welfare, Government of India, 1978.
- Report of the Review Committee on the NAEP, New Delhi, Ministry of Education and Culture, Government of India, 1980.
- National Policy on Education*, New Delhi, Ministry of HRD, Government of India, 1986.
- Patel, Ila "Trends in Adult Education Research in India." New Delhi, National Institute of Adult Education, 1994 (Mimeo).
- Patel, Ila, "Evaluation of AEP in India," *Indian Journal of Adult Education*. Vol. 57(2),

1996, pp. 28-34.

Pillai, Sadasivan, "From Three R's to Empowerment," *Indian Journal of Adult Education*, Vol. 58(3), 1997, pp. 71-76.

Puri, Kuldeep and Kaur, Navleen, "Attitudinal Development in Neo-literates Through Literacy" *Literacy Mission*, Vol. XXI (1-4). 1997, pp. 23-27.

Ramabrahmam, I., *Adult Education—Policy and Performance*, New Delhi, Gian Publications, 1988.

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**B.S. Garg  
K.C. Choudhary**

## **Training in Adult Education in India—Some Observations on Policy and Planning**

It has been realized by all that if we are to compete, develop and survive, the most critical resources to rely on are people's talent and energies. The concept of adult education is expanding and is not merely limited to literacy. At the international level the recent report of the Delors Commission 'Learning : The Treasure Within' has further expanded the concept of learning throughout life and accordingly, four fundamental pillars are to be constructed i.e. learning to know, learning to do, learning to be, and learning to live together.

Adult education in the Indian context has been concentrating more on literacy, and in the recent past some efforts have been made towards post-literacy and continuing education alongwith skill development programmes. Recently, it has been regarded as a major component of Human Resource Development as policy makers and planners have realized that development would never become self-sustaining unless it is accompanied by corresponding changes in the attitudes, values, knowledge, and skills of the people as a whole.

If we go through the history of adult education in India, it would be revealed that in adult education due emphasis had been given to formulation of training policies, training strategies and programmes. With the launching of the National Literacy Mission, Project Formulation Guidelines were issued. These Guidelines were supposed to be implemented in operationalising the Literacy and Adult Education Programmes throughout the country. According to the Guidelines, "the success of the campaign will depend on the volunteers, master trainers and resource persons involved. In a campaign, the numbers involved are large, and the selection and training strategy requires meticulous care at all levels. The separate strategy for training of volunteers, master trainers and resource persons is required to be worked out for literacy instruction." The Working Group of the Planning Commission on Adult Education for the Ninth Five year Plan (1997-2002) has also emphasized the need for proper training of the functionaries in the context of literacy, post-literacy and continuing education programmes in the country and accordingly, "with the expansion of literacy and post-literacy campaigns and launching of continuing education programmes, the training needs of a larger number of volunteer instructors, trainers and resource persons will have to be made and other important aspects of functional literacy, skill development and empowerment are to be integrated in training modules to be designed. A large number of training programmes will have to be organised for key resource persons and senior level functionaries

of States/districts to orient them about new strategies in continuing education programmes.”

For implementation of the literacy and adult education programme in the country the involvement of Panchayati Raj functionaries with the 73rd and 74th amendments to the Constitution is very necessary, and in order to involve the Panchayats in the programme as a policy matter orientation and training of Panchayati Raj functionaries has become compulsory. Therefore, the Working Group of the Planning Commission on Adult Education (1997-2002) has recommended as follows :

- Local bodies to be given adequate orientation about the implementation of the whole programme through a number of orientation and training programmes for Panchayat functionaries in the States.
- The primary responsibility of conducting orientation and training programmes at the village, block and district levels, shall be of the Zilla Saksharata Samitis.
- The State Resource Centres in each of the States would have to assume major responsibilities for identification of trainers and resource persons, development of comprehensive training strategies and appropriate training modules for imparting training to functionaries on a highly decentralised basis.
- The Directorates of Adult Education would have to closely monitor the progress in organising the training programmes for Panchayati Raj functionaries.

During the next plan, every district will have a Shramik Vidyapeeth (SVP) which will give priority to training requirements of neo-literates. For promoting skill development programmes, the main task of each SVP will be to act as district level resource support agency specially in regard to the organisation of vocational training and skill development programmes for the neo-literates and other targets groups under the scheme of continuing education for neo-literates. The SVPs will also work as nodal agencies for conducting various equivalency courses to be organised by both State and National Open School/ University

A review of the efforts made so far in policy formulation and planning on training in adult education in India indicates that though meticulous planning has been made and concrete policy guidelines formulated, there is a lacuna in the implementation of these programmes and policies at the grassroot level. Many research and evaluation studies have been conducted regarding the implementation of Total Literacy Campaigns in India and these studies have revealed the following weaknesses which need to be rectified immediately.

1. It is not primer specific.
2. Lack of proper planning.
3. Training needs are not properly identified.

4. Appropriate training methods are not used (focus is only on lecture method).
5. Lack of relevant training materials on specific aspects of TLC.
6. Proper monitoring, evaluation and documentation are not seen.
7. Number of participants is very large.
8. Insufficient support system for training.
9. Same training model is followed in low and high literacy areas.
10. Research in training is very poor.
11. Development of training skills is not properly done.

These studies have also revealed some strengths of the training programme; which are as follows :

1. Separate training programmes for different cadres.
2. Residential training at the apex level.
3. Specific materials/documents etc. are available on TLC.
4. District Administration plays an important role.
5. Decentralisation of training at the implementation level.
6. Training is seen as a socio-educational process.

L. Mishra, former Director General, National Literacy Mission, in his paper entitled 'SHARING SOME OF THE CONCERNS OF PARTICIPATORY AND COMMUNICATIVE TRAINING IN A TOTAL LITERACY CAMPAIGN' has very elaborately discussed training policy and its implementation in the Indian context. The volunteer, after going through training process, must enable the learner to unearth or diagnose the loopholes of the system and finally muster enough courage and confidence to confront the perpetrators of the inequity and imbalances in the system. Every lesson in the primer must be subjected to a dialectical analysis and training must enable the participants to think, reflect, analyse, question, and accept what is relevant and reject what is not. The curriculum and course content of training, alongwith the Volunteers and Master Trainers Guide, must deal with the lessons in a such a way that all aspects of an issue are analysed threadbare before the conclusions are reached in the right manner. The missing link in training strategy is that we have not succeeded in making training primer specific. He further elaborates the dilemma in training with reference to bringing the formal and non-formal systems closer to each other. The resource persons and the master trainers, by and large, are drawn from the formal system, while the majority of volunteers are drawn from the non-formal system. The resource persons and master trainers with different attitudes, approaches and insights usually find the process of adjustment with the non-formal system extremely difficult. A synthesis between the two systems has to be brought about through training. The methodology should be participatory. As Paulo Friere puts it, or the teacher is not merely one who teaches, but one who is himself taught alongwith the students. They become jointly responsible for a process in which all grow with equality, freedom and spontaneity," It has generally been seen that the training is mostly lecture based

and is rarely based on group discussion, role play and simulation exercises. A serious omission in training is the lack of evaluation of training programmes and how far the skills imparted in the course of training have been internalized and put to use in the real learning situation. Follow up of training programme alongwith refresher training is also missing.

Mushtaq Ahmed and Satyen Maitra while discussing on 'Training of TLC Personnel' have emphasized the need of a system-approach for training, by which the training needs are to be identified properly, and training designs made and used suitably.

On the basis of the guidelines on training policy, strategies for implementation and actual implementation at the field level, the following are some parameters to be observed to make the training programmes effective.

1. The training syllabus should be stripped of all irrelevant and extraneous contents and should be related primarily to the learning/teaching materials which already have awareness, functionality and national values built into them.
2. The skill for imparting literacy in an attractive manner should be developed and upgraded. To do this, during the period of training, two or three prospective learners should be tagged to each trainee. They can later on be absorbed in the literacy centres. This would develop the art of tackling illiterates which cannot be learnt in a simulated classroom situation. Such practice teaching can be arranged outside the regular training hours, particularly if the training camp is residential. The use of simple audio-visual aids, particularly the alphabet and sentence cards should be given much more importance.
3. Training should be clearly linked to the proper utilisation of the Instructor's Manual which must be prepared lesson by lesson for the TLC programme. If that is done, the trainees will have a clear understanding of the time allotted for each component of literacy.
4. Discussion, which is an integral part of adult education is always given a short shrift in it. To counter this, how to conduct discussion on the topics which emerge from the lesson units should be clearly demonstrated to the learners. Each discussion session, based on a lesson unit, should be planned and should not exceed, say, more than 15/20 minutes. When the topic for discussion becomes a bit technical, it is desirable that a Resource Person should be invited to give suitable guidance to the learners. How to conduct an educational discussion/session should form a part of the training syllabus.
5. There should be at the end of each lesson unit, a system-approach analysis which should be undertaken by the instructor to find out whether the objectives for each lesson unit in terms of literacy and awareness have been achieved. If they fall short of that, changes in the process and inputs would be affected. For example, more time may be

needed and better use of audio-visual materials may have to be made. Most important of all, conscious effort should be made, right from the first primer, to open up the minds of the learners and make them more active learners than just repositories of what is being told by the instructors.

6. A strict directive should go out from the District Literacy Committees that the Key Persons, Master Trainers and Volunteer Instructors should study the Primers and the Instructor's Manual thoroughly before they come to attend the training courses. Even a short training course will be much more effective, if this is observed.
7. Great care should be taken in the selection of trainers and instructors as regards their competence and commitment. No political and other consideration should interfere in the selection.
8. The training of the Key Persons and Master Trainers should be the responsibility of the SRCs, particularly if they have prepared the learning/teaching materials.
9. Training should not be confined only to the Key Persons, Master Trainers and Volunteer Teachers. The District Officials, the Panchayats, the Municipal Functionaries and the Members of the District Committees should also be properly oriented to implement the programme correctly. Absence of such orientation results in different perceptions by different people which can distort the programme.
10. Training aids need to be developed. There is too much reliance on 'talk' and 'chalk.' Practically very little use is made of modern educational technology.

The National Literacy Mission has already realised the importance of training and its proper implementation at the grass-root level. The Working Group of the Planning Commission on Adult Education for the Ninth Five Year Plan (1997-2002) has recommended as follows :

"In view of the very large number of volunteer teachers, master trainers, functionaries and resource persons involved in the literacy effort, training has been found to be one of the weakest links in effective implementation of literacy programmes. With the extension of the literacy programmes during the Ninth Five Year Plan, the number of volunteer instructors and other functionaries required to be trained under the programme is likely to increase further. Moreover, since the focus of the literacy programmes during the Ninth Five Year Plan would be on post-literacy and continuing education. This would necessitate identification and mobilisation of volunteer instructors, trainers and resource persons of much higher calibre so that in addition to literacy instruction, other important aspects concerning functionality, skill development and empowerment are adequately attended to. A wide range of alternative training strategies and methodologies would, therefore, have to be worked out for imparting training to a large number of literacy personnel on a highly

decentralised basis. While some State Resource Centres have during the 8th Plan attempted to develop training designs and action plans for training of functionaries for post-literacy and continuing education programmes, a comprehensive training strategy and appropriate training modules would have to be prepared by the Directorate of Adult Education. With their present size and resources, the Directorate of Adult Education (Government of India) or even the State Resource Centres will not be able to meet the full training load and demand during the Ninth Five Year Plan. It would, therefore, be imperative that the DAE be adequately strengthened to undertake large scale training programmes for training of key resource persons and senior State and District level functionaries. Besides upgrading the capabilities of DAE to undertake such training programmes, DAE would also have to be enabled to identify and collaborate with other training institutions of repute and standing to meet the training needs emanating from the State and the Districts." The horizons of training and skill development programme during the twenty-first Century are going to be broadened in India.

**Rajinder Peshin  
Rajinder Kalra  
S.S. Gill**

## **Nonverbal Communication : An Important Mode of Communicating with Farmers**

Nonverbal communication involves the use of symbols other than written or spoken. It refers to postures, gestures, facial expressions, symbolic clothing, and so on. Research has established that in a communication system 35 per cent of the message is carried verbally, while 65 per cent is carried nonverbally (Birdwhistell, 1972). The term 'nonverbal communication' was coined in the 50s. Before discussing the process of nonverbal communication it is important to know the results of some of the empirical studies on the subject.

Duchenne (1862) published a study of facial muscle, where he studied appearance of emotional expressions on the paralysed face of an old man. Bell (1865) and Charles Darwin (1872) argued that facial expressions are innate, whereas Sherman (1927) was of the opinion that expressions are not innate, but socially learned habits. Birdwhistell (1952) framed a coding scheme for body motions just as linguists had done for spoken language. Cody and O' Hair (1983) conducted a study on nonverbal communication and deception, and revealed that females exhibit greater control than males while lying. Burgoon and Coker (1988) in their study on the nature of conversational involvement and nonverbal encoding patterns showed that involvement was correlated to nonverbal behaviour (Kinesic<sup>1</sup> and Proxemics<sup>2</sup>). Malatesta (1988) on the basis of his study, 'Nonverbal Communication Skills' suggested that affective expressions of older subjects may be harder to encode owing to age related changes in the face. Monterpare *et al* (1988) revealed that the subjects were able to identify sadness, anger, happiness, and pride from gait.

### **Dimensions of Nonverbal Communication**

The role of nonverbal communication can perhaps be seen most clearly, when we see on the one hand the relationship between communicators, and on the other hand, the connection between the message and the events it represents.

Message of relationship is on dimension of nonverbal communication. Suppose, Mr. A and Mr. B, two extension workers for that matter, get together

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1. Kinesic deals with the study of the body movement.
  2. Proxemics is the way we react to space around us and how our use of space communicates particular information.

and exchange information about the holding of a farmer's training camp. For this, Mr. A and Mr. B will have to establish a relationship, their own communication system. The two extension workers will have to go through a surprisingly complex ritual and exchange elaborate, but often little noticed message. They have to signal, for example, whether they are available to each other for interaction, and sometimes they have to work out matters of hierarchy. Is one superior to the other? Who is going to play what role? Or are both equals? They have to work out signals, to let each other know if they understand, if they approve, if their communication system is working smoothly. We find many of them are nonverbal, such as catching the other person's eye, giving a smile, nod, and pause in movement. We take charge or let others take charge, with eye contact, body posture, facial expressions, movements, etc.

Message of content is usually noticeable as compared to the message of relationship. In the dissemination of agricultural technologies, we generally use written or spoken words, but to have effective impact on the audience, be that of farmers or extension workers, we can effectively represent events with nonverbal aids: pictures, models, maps, graphs and the like. Our modern mass media have enormous capacities to transmit messages encoded in nonverbal symbols. Media such as television and multicolour periodicals are nonverbal to a great extent.

In verbal communication we use digital code such as alphabets or numbers to construct complex messages. In digital code there is no necessary resemblance between the elements and anything the communicator might want to encode, as we use letter 'g' in grape, grass hopper, green manuring without expecting three items to resemble each other in anyway. In contrast, in nonverbal communication we use analogic codes, which preserve some elements in what it represents. A picture of a stem borer of rice is the analogic encoding pictured. An analogic code is better suited in transfer of technologies. The digital code must be learned since there is no natural relationship between the code and the referents. This means all the (farmers) receivers in the communication system must have had some common learning experiences. On the other hand an analogic coding of insect, say stem borer, may be decoded equally well by someone, whether he is from U.S.A. or India.

Another dimension of nonverbal communication is "message in action." Verbal communication is typically one-way. In other words, at one time only one person speaks. Only after he has finished does the other person speak. It is considered impolite for two people to speak at once. On the other hand, nonverbal communications is two-way and simultaneous. An extension worker should be a good orator, and a good interpersonal or group communicator. He should be aware of nonverbal codes, viz. Facial expressions, gestures, nods etc. While the communicator is sending his message, the receiver might be sending his own nonverbal message by nodding, or smiling or frowning, or looking bored.

There are different types of nonverbal communication, even though we

often consider body language to be the only form of nonverbal communication. However nonverbal communication includes body language and much more. Each day we nonverbally signal our moods, attitudes and values to others. To be aware of all this, an extension specialist should be aware of nonverbal codes such as; facial expressions, eye behaviour, body movement, personal appearance, clothing, touching, proxemics, paralanguage, environmental factors, etc.

### **Functions of Nonverbal Communication**

Nonverbal communication plays a vital role in every communication event. Actors, dancers, teachers, writers, and other communicators have long been aware of the fact that nonverbal signs (codes) communicate a great deal. Although all of us are aware to some degree of the impact of nonverbal communication, we may not be cognizant of the extent to which nonverbal messages function in our everyday lives. According to Barker (1990), "nonverbal communication serves to repeat, substitute, complement, regulate or accent our verbal message. In addition, non-verbal cues often serve as means of deception."

In the process of transfer of agricultural technologies nonverbal communication behaviour plays a significant role. A person associated with the task of extension related programmes should be good at nonverbal codes as 65 per cent of two way communication is nonverbal. Proper attention needs to be given to learn these communication skills to make our communication system work.

When we communicate with one another, we use words and their nonverbal equivalents at the same time. For example, while discussing with a farmer the advantages of Integrated Pest Management programme, the verbal statements of agreement or disagreement (Yes, No ....) by the farmer are often accompanied by a nod or shake of the head to indicate a positive or negative response. These nonverbal gestures are called repeating messages. Repeating messages are done almost without thinking. They are the basic part of language behaviour occurring naturally. Sometimes when hearing or speaking is not possible, nonverbal communication often replaces verbal messages. In such instances nonverbal messages are called substitutes, because they take the place of words. While demonstrating the working of a combine harvester to farmers the demonstrator asks some questions, and a farmer, instead of answering verbally sometimes may nod his head up and down, meaning yes. For nonverbal communication to act as substitute, it must be recognised and more importantly interpreted in the same way by most of the people in a specific group, subculture or culture. Indians say "I" by pointing towards their chest. This would not be understood in Japan where "I" is symbolized by pointing to one's nose. The nonverbal communication on the otherhand complements, the verbal message. To understand how important these complementing actions can be, just try to describe the shape of an insect, without using nonverbal behaviour. The height

of a wheat variety is 3 feet tall, which is explained by the hands held 3 feet apart. While delivering a lecture to farmers or while participating in a panel discussion on television, complementary behaviour is used to emphasize a point. One of the most common purposes of nonverbal communication is regulating. For the sake of making the point clear, let us assume that two extension workers are discussing the highlights of a *Kisan Mela*. Without regulating message they may sound like this :

"Hey, did you visit the tissue culture stall?"

O.K. I have finished talking for the moment, You can speak."

"Thank you, I wanted to answer your question,

Yes. It is a new experience."

"Can I talk?"

"You want to talk again? Sure."

Fortunately typical conversations do not require this kind of verbal permission to speak. Nonverbal cues automatically keep the conversation flowing. Nodding, looking at the area around the eyes of the other person are examples of such nonverbal gestures. We sometime accent the spoken words by using gestures or punctuate spoken words. Our entire meaning often depends on which words are accented. Sometimes physical movements of an individual can conflict with the verbal message. Sometimes we purposely deceive others or supply them with false information. For example, a farmer may not be satisfied with the extension worker's way of demonstrating a thing, but still a farmer says that it was excellent, to avoid annoying the extension worker. At the same time, the farmer is staring unconvincingly at the eyes of the extension worker. If the worker is sensitive to nonverbal behaviour, he may pick up this contradictory message. Deception cues are : overly exaggerated smile or too severe a frown etc. Biting of finger nails can reveal nervousness, or clenched fist can leak the desire to fight. Significantly, face and the eyes are the best senders of messages.

Much of the nonverbal communication, is below our level of awareness. Most of the institutions provide training in communication skills, but proper attention is hardly paid to interpretation of nonverbal communication. It is important for all such institutions where communications is offered as a subject, to train the students in sending, receiving, and interpreting nonverbal communications. Only then the communication system can work effectively in transfer of technology. "It is important to be aware of our own nonverbal communication as well as that of others," (Berko, *et al*, 1977). As already stated, because in two-way communication system 65 per cent of the communication is nonverbal, much of the message conveyed to farmers may be lost, if extension workers are not aware of both verbal and nonverbal behaviour. Verbal and nonverbal communication are complementary, neither is complete without the other.

## References

- Barker, L.L. 1990. *Communication*. Prentice Hall, Englewood Cliff, New Jersey, pp. 69-99.
- Bell, C. 1865. c.f: *Hand Book of Communication*, 1973, Rand McNally College Publishing Company, Chicago, p. 95.
- Berko, R.M., Wolvin, A.D., Wolvin, D.R., 1977. *Communicating : A Social and Career Focus*, Houghton Mifflin Company, London. p. 229.
- Birdwhistell, R.L. 1952. c.f: *Hand Book of Communication*, 1973, Rand McNally College Publishing Company, Chicago, p. 96.
- Birdwhistell, R.L. 1972. c.F: Berko, R.M. Wolvin, A.D. and Wolvin, D.R. 1977. *Communicating : A Social and Career Focus*, Houghton Mifflin Company, London, p. 85.
- Burgoon, J.K. and Coker, D.A., 1988., *The Nature of Conversational Involvement*, *Communication Abstract*, Sage Publication, London, New Delhi, 11(1) : 126.
- Cody, M.J. and O' Hair, H.D. 1983 *Nonverbal Communication and Deception : Differences in Deception Cues Due to Gender and Communication Dominance*, *Communication Monographs*, 50, pp. 175-92.
- Darwin, C., 1872. c.f : *Hand Book of Communication*, 1973, Rand McNally College Publishing Company, Chicago, p. 95.
- Duchenne, G.A., 1862 c.f: *Hand Book of Communication*, 1973, Rand McNally College Publishing Company, Chicago, p. 95.
- Malatesta, C.Z., 1988, *Communication Skills : Nonverbal Communication*, *Communication Abstract*, Sage Publications, London, New Delhi, 11(1) : p. 72.
- Montepara, J.M., Goldstein, S.B. and Clausen, A. 1988. *Affective Communication Skills, Nonverbal Communication*, *Communication Abstract*, Sage Publications, London, New Delhi, 11(1), p. 75.
- Randall, P.H. and Wayne, W.C., 1975, *Communication and Behaviour*, ed. Hannenman, G.J. and Mcewen, W.J., Wesley Publishing Company, London, pp. 76-97.
- Sherman, 1927, c.f: *Hand Book of Communication*, 1973, Rand McNally College Publishing Company, Chicago, p. 95.

Katy Newell-Jones  
Jan Grant  
Nick Hutchinson  
Julia Robinson

## Encouraging Greater Participation in Community Projects through the Use of Locally Produced Case Studies

One of the key components to successful community projects is the active involvement of the local partners and community. The need to reflect on the extent to which local partners and beneficiaries can genuinely participate in determining the direction of development projects has been highlighted by Craig and Porter (1997). The aims and structure of a submission for funding necessarily outline the activities and enable monitoring against pre-set outcomes. However, if defined too rigidly, these can be restricting when it comes to 'fostering local initiatives and control' which are important in ensuring that a project is responsive to the changing priorities of local partners.

This paper does not attempt to explore the issues of balancing the need to be accountable to funding agencies whilst ensuring that participants have opportunities to influence the direction of a project. Instead, it looks at an instance where local NGO trainers, in India, selected a training method introduced to them in one context, developed it for their own use, and have embedded it into their own methodology. In this way, the technique was used within the lifetime of the project to meet the pre-set outcomes, but at the same time it was developed by local NGO trainers so as to be of continued use across a range of existing and new projects.

### The Project

Education for *Development* has been involved in a two-year project working in partnership with two NGOs in India to extend the skills of local trainers. The aim of the project was to increase the earning capacity of independent women workers by widening the training programmes of the NGOs to include small business skills. The NGOs were St Xavier's Social Service Society (SXSSS) which works in the slum settlements of Ahmedabad in Gujarat, and the Social Action Centre (SAC) based at Ayan Poruvai, a village in a rural area of Tamil Nadu.

In most, if not all, developing communities, there are individual women entrepreneurs who have developed income-generating schemes which are successful over a period of time (Humble 1994; Pickering, Kajura, Katongole and Whitworth 1997). One of the approaches used in the Education for

*Development* project was based on the case studies of Humble (1994) where the lives of individual successful women entrepreneurs were documented and used as positive role models and as a stimulus for discussion. This approach has the advantage of relating to actual local women and also of looking at the lives of women from a holistic perspective.

This paper describes the way in which the training skills of local trainers in SXSSS and SAC were developed with the use of locally generated case studies in awareness-raising activities. Over the period of the project, staff from the NGOs piloted and adapted materials and explored different methods for different purposes. One NGO, in particular, now uses a case study approach with a range of local initiatives, some though not all, related to income-generation.

## **Methods and Materials**

### **The development of local case studies**

At the beginning of the project, the practice of 'story-telling' to local groups of women was well-established with staff from SXSSS and SAC. It was used primarily as a means of "telling" local women how to improve their lives or what would happen if they did not change their patterns of behaviour. For example, if they did not look after the health of their children, the children could die from disease or malnutrition. In some cases, posters or flip-charts were available to support the telling of stories. The key feature of the method was that all the information which local women required about the perceived problem and its solutions was contained in the 'story' and given to the local women by NGO staff. The women were usually passive listeners, although drama, role play or songs were sometimes used to reinforce a point. Where questioning was used, it was as a means of reinforcing a point already made, not of enlisting the support of the women in identifying possible solutions.

Many of these awareness-raising sessions were entertaining and enjoyable, with some of the NGO staff exhibiting considerable skills in keeping a group entertained. However, the NGO staff often complained that the 'message' was not listened to or acted upon.

As part of the project, NGO staff at SXSSS and SAC identified a small number of local women who have been successful in establishing income generating schemes. The purpose of this activity was to begin to identify the characteristics and skills needed by local women to succeed with small businesses and also to develop positive role models of women which could be used to motivate and encourage others.

The lives of these women were written up in the form of short case studies to be used in awareness-raising sessions with local groups of women. Two examples are given below. The aim was to provide the opportunity for the local women to participate actively in the identification of problems and difficulties and to use their own experience and creativity to find realistic solutions.

The Key features of the case studies were

- They were based on actual local women who had developed and maintained a successful small business over a period of time
- they were written in a language and style appropriate to the women
- each case study took approximately 5 minutes to read out loud
- they included some of the difficulties and failures which the women had encountered during their lives as well as the successes
- they reflected the lives of many local women and the goals were relevant and realistic to other local women
- they were written in a non-judgmental style
- the identity of the woman was concealed
- a set of 4-8 questions was devised for use with the case study to stimulate discussion and exchange of ideas amongst the women.

### **Case Study 1**

*An example case study produced and used with local women in Ayan Poruvai, Tamil Nadu by trainers from the Social Action Centre (SAC).*

#### **A story of a woman from Pudukkotai**

Rameela lives in a village in the Pudukkotai district of Tamil Nadu. She was born in 1940 and she married when she was 17. She has six children; four daughters and two sons.

Every day her husband does agricultural labouring although when the rains do not come he has no work. In the evening he drinks arrak with the other men.

Rameela cannot read or write and only two of her children go to school. She keeps the others at home to help her with the cows.

Every evening, after she has finished her work with the children and the house, she sits down to make mats out of the date palm leaf. Rameela's mother taught her how to make mats and she has taught two of her daughters. Many women in the community also make date palm mats.

The date palm leaves are collected from the forest by boys. They are paid 5 rupees per load but are very unreliable. They complain that their wage of 5 rupees is not enough; so sometimes Rameela has no fibre to work with.

Because this is a hobby, Rameela and her daughters make only a few mats which she sells locally. She manages to increase the family income a little with this money.

People who live outside the locality do not know about Rameela's mats. She would like to sell more but does not know how to go about this.

### **Questions**

(These questions were used to stimulate discussion. The resulting discussion was wide-ranging and not restricted by the questions.)

1. How old is Rameela now?
2. In what year was she married?
3. Which craft skill did she learn from her mother?
4. How might Rameela make sure that she had enough raw material to make more mats?
5. How might Rameela begin to sell her mats in other villages further away?
6. What effect might her husband's drinking have on her family?
7. How might the women in Rameela's village benefit from working in a group? Can you think of any disadvantages?

### **Case Study 2**

*An example case study produced and used with local women in Ahmedabad, Gujarat, by trainers from St Xaviers Social Service Society (SXSSS)*

#### **Story of a Woman and her Business**

Saraswathi lives in a slum on the outskirts of Gandhinagar in Gujarat. She was born in 1940 and she stayed at school until the 5th grade.

Before she married she learnt cutting and sewing. She got married when she was 17. Her husband's family expected her only to work in the house, but her husband's income was very low. This was not enough to support their 7 children and parents.

To try to earn more money for her family, Saraswathi decided to start a sewing business. She asked for advice from the local Social Service Society and she took a lot of trouble to train herself to produce marketable goods.

Because her work was of such good quality, a Government office promised to give her orders. Now that she had so much work, she asked the Social Service Society to help her bring together a group of women and to train them to produce high quality work. She also asked another local person to help her with cutting cloth and distributing it to women in the group.

During this time her husband was getting very suspicious and unhappy about her activities and he left her. She carried on with her business and supported her children.

Many people in her community were suspicious and jealous of her activities. They said bad things about her. Other businesses tried to take her business away.

However, she continued with the business and even though it is now well-established she still looks for new customers and also makes new designs. She has learnt how to work with her group to get their co-operation and support.

Saraswathi's business is now successful, employing over 40 women. She has to work very hard and there are still a number of difficulties she has to face.

#### **Questions**

1. When was Saraswathi born?

2. How old is she now?
3. What skills did she learn before she was married?
4. Why did she start a business? What sort of business is it?
5. Why did the Government office promise her orders?
6. Why did Saraswathi's husband leave?
7. What do you think made the people in her community suspicious of her?
8. Give three reasons why her business continues to be successful?

### **The use of the case studies in a training session**

The way in which the case studies were used in practice was the key to their success. The principle was that the case study was read out loud to the local women without comment. The local women then divided themselves into small groups to discuss and agree their answers to the questions. This enabled them to explore the issues which were important to them and arrive at their own conclusions or solutions.

In all instances, the case study and the questions were available in written form in the local language. All of the groups consisted of both literate women and non-literate women who were used to using the skills of the literate women to read and record. This was a supportive process with both literate and non-literate contributing to the discussions.

In the most effective case studies, the questions began with 2 or 3 simple ones where the answers were contained in the text e.g., When was Saraswathi born? How old is she now? These questions established the importance of listening to the text and built the confidence of the group.

The emphasis on the other questions was to encourage the women to share ideas and think creatively e.g., How could Rameela start to sell her mats in other villages further away? How might some of the women in Rameela's village benefit from working in a group? Why did the Government office promise Saraswathi orders? Why do you think her business continues to be successful?

Wherever the case study technique was used, the local women responded well and welcomed the opportunity to discuss issues important to them. One of the reasons why the technique was so effective was because the case studies were based on a sound basis of knowledge of the lives and stresses of local women. This knowledge had been acquired through the work which local NGO staff had carried out with local communities over a considerable period of time.

Over an 18-month period, several variations in methodology were explored, ranging from the trainers strongly directing the activity, to small sub-groups appointing their own recorders, facilitating their own discussion and feeding back their responses to the whole group.

The participation of local women was greatest when the group divided itself into sub-groups of less than eight, where local women took responsibility

for reading out loud the case study and questions and recording the responses of the group. Where the trainers opted to act as the readers and recorders themselves, this tended to result in a shorter, more focused activity with more direction from the trainers and significantly less participation by the local women.

Where the practice of small groups of local women working and discussing issues on their own was unfamiliar to the trainers and the participants, it took time and practice for the trainers to feel sufficiently comfortable to leave the groups to carry out the task unaided. The women also needed time and encouragement to take responsibility for the task as a group without an NGO trainer.

In the first case studies produced, the identity of the woman concerned was kept confidential with details like her name and exactly where she lived being changed. However, the trainers and local women preferred to know who the case study was based on and the women concerned were proud of their achievements, so later case studies identified the woman clearly. Occasionally, this led to discussions centring around the person but usually the women quickly moved on to consider the wider issues and how they related to others, not just the person profiled. This adaptation was an example of how the NGO trainers and local women were involved in evaluating the technique and making changes which suited their situation.

As the project progressed, the confidence and skills of the local trainers improved and the activities became more participatory and focused on the lives of the women. This resulted in a much greater level of involvement by the women in the sessions and led to a higher level of motivation and commitment to take ideas away for their own use.

### **Types of case studies developed**

The most marked developments in the use of case studies came in Ahmedabad where SXSSS had an established practice of running training events for groups of local women from the slum settlements. This meant that the NGO staff already had a range of training methodology to build on. The women from different slum settlements were also familiar with the SXSSS staff and were used to meeting together for training on a range of topics.

Initially, case studies were used in Ahmedabad by SXSSS trainers as a means of involving the NGO trainers and local women in identifying the key skills which have helped women to establish successful small businesses. These included producing a high quality product, being reliable and consistent, able to overcome difficulties, actively searching for a market, adapting to new markets, involving other members of the family. The effect of using this 'participatory' approach rather than a 'telling' style was that there was much greater involvement by the local women and they also felt that the story reflected their lives and meant a great deal to them.

Staff from SXSSS have continued to use and develop further case studies

on a range of subjects which include running a small business, setting up a savings group and working co-operatively as a group. Often an element of 'drama' is used to explore the issues raised. This is a form of expression with which the local women are comfortable. One or two of the more recent case studies are of 'communities' rather than 'individuals' which have been used with groups who may take part in a new slum net-working project in Ahmedabad. More recently, the trainers have become aware of deciding to use the case study approach either as a 'tragic story with a message' for example with health issues or as a motivation forces as in the case of the small business and group co-operation case studies. In both instances, the emphasis is on allowing the women actively to discuss the issues applicable to them.

The way in which trainers from SXSSS have developed this technique and adapted it to a variety of different situations indicates that it is becoming embedded in their methodology and will continue to be used beyond this particular project. It has also become accepted as a training technique which is useful in aspects of their work other than income-generation.

At SAC in Tamil Nadu, training had previously been undertaken on an individual basis, and so the skills involved in planning, delivering and evaluating a structured training event for a group of local women were new to the trainers. As a result, there were fewer opportunities for the development of case studies during the project than in SXSSS. However, staff from SAC wrote a number of case studies based around small businesses in rural villages which were used successfully with local women. The 2-year project included exchange visits between staff from the two NGOs which gave SAC staff an opportunity to observe case studies being used by SXSSS. This positive experience has motivated SAC staff to develop this approach more for their own use.

### **Conclusions**

The way in which local NGO trainers, especially at SXSSS, have adopted the case study method is an example at the micro-level of a participatory approach leading to local initiatives which extend beyond the scope of a single project.

The use of locally generated case studies has provided an opportunity for NGO trainers to see the benefits of placing the experiences of the target group at the centre of a training session and using them in a positive manner to draw out the strengths within the group. Walters and Manicom (1996) refer to the need to give 'attention to the feelings and emotions of the learners' and to 'validating' the experiences of women participants. This technique gives opportunities for both these activities to take place, and the local women valued this. The NGO trainers have demonstrated to themselves the advantages of active participation by local groups of women. As a result of this project the trainers also feel that they have access to a new teaching method they can control and which is adaptable and flexible.

The case study approach could not have been used as effectively without the detailed background knowledge and experience of working with the target groups which the local NGO trainers provided. This knowledge ensured the production of case studies which the local women related to strongly. Another important aspect was the willingness of local trainers to experiment with new methods and to evaluate and adapt them.

The U.K. trainers have also learnt from this process, through observing the way in which a simple training technique has been analysed and developed for use across a range of projects incorporating culturally appropriate variations like the dramatic role plays in India.

Finally, the adoption of the case study approach has resulted in the beneficiaries, local women, playing a more active role in the training provided for them by the NGOs. This has led to an increase in confidence, the sharing of ideas and examples of 'good practice' and an increased motivation to develop new methods of working individually and supporting each other.

### **Acknowledgements**

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### **References**

- Craig D. and Porter D.**, 1997, Framing Participation : Development Projects, Professionals and Organisations, *Development in Practice*, 7(3):229-236.
- Humble M.** (ed.), 1994 in *Women in Business : Training Materials for the Promotion of Self-employment among Women*, Commonwealth Secretariat.
- Pickering H., Kajura E., Katongole G. and Whitworth J.**, 1997, Women's groups and individual entrepreneurs : a Ugandan case study, *Gender in Development*, 4(3):54-60.
- Walters S. and Manicom L.**, 1996 in *Gender in Popular Education—Methods for Empowerment*, edited by Walters S. and Manicom L., ZED Books, London & New Jersey, CASE Publications, South Africa.

S.Y. Shah

## Book Review

*Literacy and Empowerment* by Athreya, Venkatesh B and Chunkath, Sheela Rani, Sage Publications, New Delhi, 1996, pp. 299, Price Rs. 295.

An interesting outcome of Total Literacy Campaigns has been the blossoming of professional camaraderie among the administrators, activists and academicians. Apart from undertaking collaborative field activities some of them have also brought out joint publications on literacy campaigns which did attract the attention of scholars and policy planners mainly due to their objectivity and critical insights. The book under review is one such outstanding work on the Pudukottai Literacy Campaign of 1991-92. Co-authored by Dr. Venkatesh Athreya, an Economist and an activist of the Bharat Gyan Vigyan Samiti and Sheela Rani Chunkath, the former District Collector of Pudukottai (during the phase of Total Literacy Campaign), this book discusses different dimensions of planning and management of the Pudukottai Literacy Campaign and its impact on the society. The book also provides an overview of the development of adult education in India in general, and Tamil Nadu in particular, thereby giving the reader a much broader perspective on Indian adult education. Yet, one wonders why the authors left out any discussion on the provincial Mass Literacy Campaigns of British India (1937-39) which had several common features with the current Total Literacy Campaigns. Such a discussion would have enabled us to know whether there was any change in campaign strategies after a gap of fifty years. This assumes considerable significance as a section of adult educators claims that there has been no change in campaign strategies since the 1930s and the present campaign model is a replica of the ones used during the colonial regime.

The success of Pudukottai Literacy Campaign which followed soon after the Ernakulam Literacy Campaign cannot be undermined as the replication of the latter. In several ways the Pudukottai Campaign was more challenging and covered a much bigger target and had a tremendous impact on women. At the time of launching the Campaign, the literacy rate in Pudukottai was 58.4 per cent as against 76.82 per cent in Ernakulam. The number of illiterates in Pudukottai (2.9 lakhs) was also much higher than that of Ernakulam. Unlike Ernakulam, Pudukottai was not a well endowed district. In fact, it was one of the most backward districts of Tamil Nadu with respect to practically all literacy indicators, health, and economy (p. 134). From being a district with low literacy rate in Tamil Nadu, Pudukottai was catapulted to be the first fully literate

district in the State within a year. The transition was exclusively due to successful planning and implementation of literacy campaign.

Pudukottai Literacy Campaign had several innovative features. It had a young and dynamic District Collector and a core group of committed literacy activists drawn from the Tamil Nadu Science Forum, Bharat Gyan Vigyan Samiti (BGVS) and the district administration. Their esprit-de-corps, diligence and dedication demonstrated that a few powerfully motivated people could set in motion a process of change (p. 143). In this connection, the role of BGVS in creating a nuclei of activists was remarkable. Since some of them were very familiar with the campaign strategies of Ernakulam, they could easily adopt similar strategies in Pudukottai. The entire programme was divided into three phases. The programme was conceived as a 'people's movement' with an emphasis on voluntarism and participatory approach. The main implementation strategy was a three-tier structure consisting of district administration, the full-timers and the people's committees at different levels. The campaign was operationalised in three phases, namely, the motivation-mobilisation phase, teaching-learning phase and consolidation phase (p. 136).

Of the three phases of the campaign, the teaching-learning phase holds the key to the success of the campaign. Surprisingly in most of the literacy campaigns, this aspect remains the weakest. This is due to the inherent lacunae in the training strategy which conceives training as a filtration process where a core group of 10-15 Key Resource Persons train 150-200 Resource Persons who in turn train 2000 Master Trainers. In fact, it is the Master Trainers who take up the massive and challenging task of training 25,000 Volunteer Instructors (p. 168). In this process, where training skills percolate from top to bottom, considerable transmission loss takes place which indirectly dilutes the quality of training. Since the majority of Volunteer Instructors do not possess higher academic qualifications or adequate professional expertise, it would not be surprising if they fail to do justice to their job, and consequently the learners drop-out. As noted in this book the impact of poor training of volunteers and the subsequent poor teaching could be one of the reasons for drop-outs (p. 189). The book hardly provides any information on the training methodology and teaching-learning materials. It does not say how did the ill-equipped Volunteer Instructors cope up with the challenging task of teaching illiterates.

It seems that the organisers adopted motivational strategies like Kala Jathas, local functions, and Padayatras to lure the drop-outs back to classes (p. 189) and they succeeded in their efforts. However, some information on the drop-out phenomenon—the reasons and extent—would have been very useful to the readers. Unless the teaching-learning process becomes very interesting and effective, no amount of external stimuli would retain the learners for long. Whatever learning takes place in the class room may remain superficial. This may be one of the reasons why a large percentage of learners relapse into illiteracy within a very short period after the conclusion of the literacy

programme. Irrespective of the quality of teaching-learning, a large number of people in Pudukottai learnt to read and write and succeeded in transforming their lives. The book provides several case-studies of such individuals, viz. Devi, Vasantha, Alagu, Meena, Kannagi, Lakshmi, and others. (Opp. 181-187). Apart from the learners, the campaign enabled a large number of volunteers to improve their skills in public speaking, networking and building people's organizations and emerge as grass-root level leaders (pp. 199-218).

One of the most significant achievements of the Pudukottai Campaign was the empowerment of women through various channels. As observed in this book, the Pudukottai Literacy Campaign played a crucial role in catapulting the district to national eminence mainly due to the "very imaginative and unique effort of teaching women cycling" (p. 219). It not only helped them to break many barriers of age, caste and class, but enabled them to be more self-confident, mobile and independent (pp. 219-238). Although "cycling revolution" (p. 221) had begun prior to the launching of the Total Literacy Campaign, its continuity during the campaign phase, gave tremendous boost to the entire Campaign. The combined effect of cycling and literacy brought about significant changes in the lives of women, both at personal and professional levels. Their achievements in the areas of communication and organization were remarkable. In certain villages the neo-literate women not only launched anti-arrack agitation (p. 245) but also took active part in Samata—the movement for women's equality. The literacy campaign also enabled them to form co-operatives for productive self-employment in artificial gem cutting and stone quarries. These multifaceted developmental initiatives in the lives of women played a significant role in awakening women power in Pudukottai and it emerged as a model for women's mobilisation and empowerment. Undoubtedly, some of the experiences and insights of Pudukottai Literacy Campaign would be helpful in formulating national policies. By providing rich documentation of the Literacy Campaign, this book has carved out a niche for itself to be one of the best publications on adult education that have come out in the past.

The book, published with the financial aid of UNESCO, is well produced with tabular data. It has a good cover design with unusual colour combination. One fails to understand why the book under review did not use photographs to illustrate the process of women's empowerment which was the hallmark of the Pudukottai Campaign.

## Obituary

### Malati Choudhuri

(26 July 1904–15 March 1998)

Gandhijee used to call her "Tofanee". She was Tagore's favourite "Minu". As a young student in Santiniketan, she was quite famous for her outgoing personality, taking active part in Gurudev's dance dramas, music sessions, as well as initiating innocent mischiefs in the community.

Proverbial courage, sheer dynamism and a strong zeal to fight for the rights of the oppressed and have nots were the dominant features of her character. She was frank and outspoken, and was never afraid of calling a spade a spade.

Malati Sen was born in 1904 in an aristocratic Brahmo family. She had lost her father, Barrister Kumud Nath Sen, when she was only two and half years old, and was brought up by her mother Snehalata Sen. Malati's family originally belonged to Kamarakhanda in Bikrampur, Dhaka, (now in Bangladesh) but her family members settled in Simultala, Bihar. Snehalata Sen's father was Beharilal Gupta, ICS. Ranjit Gupta, ICS, former Chief Secretary of West Bengal, was Malati's first cousin. His brother, the famous parliamentarian and former Home Minister, Indrajit Gupta is also her first cousin. Malati's eldest brother, P.K. Sen Gupta, former Income Tax Commissioner, belonged to the Indian Revenue Service, and another brother, K.P. Sen, former Postmaster General, was from the Indian Postal Service. Being the youngest child of her parents, she was a darling of all her brothers and sister. Her mother Snehalata was a writer in her own right, and had translated some works of Tagore, as is seen from her book 'Juglanjali'.

It is hard to believe that coming from a highly westernised and aristocratic family, Malati Choudhuri could adopt a completely different life style. In an article entitled 'Reminiscences of Santiniketan', her mother had written: "Malati was very happy and benefitted much from her residence at Viswa-Bharati as a student. The personal influence of Gurudev and his teachings, his patriotism and idealism, have influenced and guided Malati throughout her life."

She had been fortunate enough to have been deeply influenced by both Tagore and Gandhi. It was the former at whose feet she learnt and acquired some rare values and principles of education, development, art and culture, which had been the guiding principles in her life; and it was the latter who had a magic spell on her and at whose instance she plunged herself in the freedom struggle.

Malati came to Santiniketan in 1921, when she was sixteen. There she met

a young man of a well known family of Orissa, Nabakrushna Choudhuri, who had come from the Sabarmati Ashram, at the instance of Gandhijee, to study at Santiniketan. She got engaged to be married to him, and left Santiniketan in 1927. This was a turning point in her life.

After her marriage, Orissa became her home and her area of activity. She and her husband, Nabakrushna Choudhuri, who later became the Chief Minister of Orissa, settled in a small village named Anakhia, now in Jagatsinghpur District. In their concept and scheme of rural reconstruction, the local people were at the centre of activities. Soon came Salt Satyagraha and they jumped at that.

After Independence, Malati Choudhuri got opportunities of translating her ideas into practice. As a member of the Constituent Assembly of India, and as the President of the Utkal Pradesh Congress Committee, she tried her best to emphasize the role of education and adult education in rural reconstruction. When Nabakrushna Choudhuri became the Chief Minister of Orissa in 1951, she was assertive enough to focus the plight of the have-nots, particularly those belonging to the scheduled castes and scheduled tribes. Eventually she decided not to join politics, because Gandhijee had advised that all Congress activists need not join politics, but should work for and with the people with service as their goal.

Even before Independence, she had established the Bajiraut Chhatravas at Angul in Orissa in 1946, and the Utkal Navajeevan Mandal, also at Angul, in 1948. The Bajiraut Chhatravas, originally catering to the educational needs of the children of freedom fighters, is now a hostel for 166 boys and girls coming from disadvantaged families from all over the State. The Utkal Navajeevan Mandal is a voluntary organisation engaged in rural development and tribal welfare.

Malati Choudhuri and Nabakrushna Choudhuri, in February 1933, organised the Utkal Congress Samajwadi Karmi Sangh, which later became the Orissa Provincial Branch of the All India Congress Socialist Party.

Honours and Awards came in quick succession : National Award for Child Welfare (1987), Jannalal Bajaj Award (1988), Utkal Seva Samman (1994), Tagore Literacy Award (1995), Honour by the Lok Sabha and the Rajya Sabha on the occasion of the 50th Anniversary of the first sitting of the Constituent Assembly (1997), Honour by the State Social Welfare Advisory Board (1997), Honour by the Rajya Mahila Commission (1997), and the 'Deshikottama' (D. Litt. Honoris Causa) by her Alma Mater, Viswa-Bharati.

Malati Choudhuri was a legendary figure. She had lived an eventful life of 93 years. The vacuum created by her passing away can not be filled, and the void remains for ever!

## **Adult Education News**

### **United Nations Resolution on EFA**

In December 1997, the General Assembly of the United Nations adopted a resolution on Education for All, reiterating the importance of literacy as a human right and as "an indispensable element" for economic and social progress. It reaffirms that basic education for all is essential for achieving the goals of eradicating poverty, reducing child mortality, curbing population growth, achieving gender equality and ensuring sustainable development, peace and democracy. It took note of the progress achieved during the 1990s, as assessed at the EFA Forum's Mid Decade Meeting (Amman, 1996), and called on countries to continue to improve their provision of basic education. The resolution also called on the United Nations and UNESCO to consult countries on the possibility of launching a United Nations decade to eradicate illiteracy.

### **International Award for Literacy Research**

The Canadian National Literacy Secretariat, Human Resource Development and the Unesco Institute for Education (UIE) have announced a new cycle of the award for the best research of the year in adult literacy.

The research study should generate innovative results in regard to better understanding the complexity, meaning and impact of literacy. The possible aspects could be : approaches to and concepts of literacy-process and contents of training, post-literacy and adult learning-analysis of policies and strategies-economic significance-gender dimensions-cultural contexts-migrants, indigenous peoples, minorities-people with disabilities-the impact/use of modern technologies.

The study will be evaluated according to relevance of the content, the object of the research, methodological quality of the research and quality of the text.

The Award carries a sum of US \$ 10000.

The last date for submission of manuscript is November 30, 1998. It should be between 30,000-50,000 words with a summary of about 1800 words.

The Award will be announced in June 1999.

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- Women Empowerment and Literacy Material Development
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The Indian Journal of Adult Education, first published as a monthly in 1939, is brought out now as a quarterly by the Indian Adult Education Association. The Journal has special interest in the theory and practice of Non-formal Education with special reference to the relationship between Adult Education and Development. Contributions on a wide range of themes within this broad framework are welcome. The Journal is particularly interested in current experiments in the field.

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## OUR CONTRIBUTORS

*Sumon K.Tuladhar* is Senior Researcher, Research Centre for Educational Innovation and Development, Kathmandu, Nepal.

*Jayesh Ranjan* is former Collector, Cuddapah District, Cuddapah, Andhra Pradesh and *Vimalendra Sharan* is former Collector, Nanded District, Maharashtra.

*Meena Hariharan* and *I. Ramabrahmam* are from the Academic Staff College, University of Hyderabad, Hyderabad, A.P.

*G.P. Jain* is Free-lance Journalist, 7 Chanan Singh Park, Kirby Place, Delhi Cantt.

*Mushtaq Ahmed* is Chairman, National Institute of Adult Education, New Delhi.

*Francis E.O. Omoruyi* is Teacher of Adult and Extension Education, University of Benin, Benin City, Nigeria.

*Uma Joshi, Neepa Mehta and Hinexi Zaveri* are from the Department of Home Science, Extension and Communication, Faculty of Home Science, M.S. University, Baroda, Gujarat.

*A.B. Ogunwale and E.A. Laogun* are from the Department of Agribusiness and Rural Development, Ladoke Akintola University of Technology, Ogbomoso, Oyo-State, Nigeria.

**Editorial**

"Knowledge is not doubling—it is dwindling. We may lose half of our accumulated knowledge with this generation." says the Canadian scholar Pat Roy Mooney, who has worked with civil society organisations on international trade and development issues related to agriculture and biodiversity. His pessimism stems from the fact of the 6000 languages spoken today, "between twenty per cent and fifty per cent are not being taught to children." The University of Alaska researcher Michael Krauss sounded a note of warning at a UNESCO Conference held in 1995 that "only 5 to 10 per cent of the world's languages (300 to 600 tongues) are actually safe. Willem Adelaar of the Dutch University at Leiden argued in the same Conference that in South America, only 600 indigenous languages survive today. Five hundred years ago, Brazil alone had about 17,000 such languages. Adelaar, continuing his argument at the UNESCO gathering, said that "there are no native languages left in more than half of the South American territory." Half of the eco-specific knowledge of South America has already been trashed.

There is no policy in India which allows primary education in tribal languages for the first two years of primary schools before the child is introduced to the dominant regional language. Once the child masters the alphabet for learning the tribal language, she/he learns the State language through a bridge course. Such a methodology of literacy teaching is academically sound and operationally feasible. Such a method was used for the Dani tribe in the Central Highlands (Wamena) of Irian Jaya, Indonesia. It was later successfully replicated in other tribal areas of the country.

In some States in India, Muslim children study through the Urdu medium in the Madrasas and later study through the State language in the primary and secondary schools. There is no parallel in adult literacy. Literacy instruction is seldom imparted in Urdu to Muslim adults in non-Hindi speaking States.

The Summer Institute of Linguistics has the distinction of developing scripts for many unwritten languages all over the world. It is possible and necessary to develop scripts for the 1652 mother tongues in India for organising literacy programmes. The Central Institute of Indian Languages, Mysore, should take a lead in this direction with the help of the State Resource Centres for Adult Education.

The World Bank Survey (1994) of literacy among indigenous people in South

and Central America arouse mixed feelings. Pat Roy Mooney says, "The Bank, of course, decries the discrimination in education between indigenous and non-indigenous peoples in the region. While literacy is improving, indigenous peoples are still well behind the rest of the population in access to schools and books. But it is also possible to see the literacy figure as more a description of a people's lack of familiarity with Western knowledge systems than an absence of socially and economically important knowledge. Indeed, the level of 'literacy' in terms of life critical knowledge may be in inverse proportion to the World Bank's literacy figures. If this so, has the rate of illiteracy among indigenous peoples in Bolivia declined from 42 per cent in the 1970s to 24 per cent in the 1980s or has the rate of 'illiteracy' increased during the period from 58 per cent to 76 per cent? Should we be celebrating or commiserating?"

In 1955, the Commission on Global Governance had shown with enthusiasm that the overall rate of literacy in the South had sprung from less than half (46 per cent) in 1970, to more than two-thirds (69 per cent) in 1992. The Commission perhaps did not consider the possible downside. Does this mean that all over the world life-critical literacy has tumbled to less than a third of what it used to be?

Literacy studies have hardly been connected to indigenous knowledge. In a survey of literature done in 1997 as part of a Doctoral programme, Susan Walsh was able to find only one reference linking literacy studies to indigenous knowledge. Any research on literacy campaigns must begin with the frank acknowledgement that the wholesale loss of language and culture must be placed at the door of much broader socio-economic forces. There is a concern that literacy movements have not been totally self-critical and that adult education could have played a significant role in defending and promoting local cultures and knowledge systems. Even today, in many rural communities folk knowledge and experience of local people pass on from generation to generation. Literacy campaigns could accelerate the process of giving and taking of knowledge and experience of people, and thus, strengthen local knowledge. Let not the wave of literacy campaigns deride community knowledge systems in favour of Western technology and Culture.

Sumon K. Tuladhar

## **Women Empowerment and Literacy Material Development in Nepal**

### **Why Literacy for Girls and Women**

Although Nepal had identified literacy as a crucial factor for development as early as the 1950s, it did not have a formal primer for literacy until the 1980s when "Naya Goreto," a set of four primers, was developed. Since its inception, this set served as a ready made package for running literacy classes. Consequently, literacy classes started to flourish all over the country. There are more than 1,500 organizations which run literacy classes in the country. The literacy rate has jumped from 23.26 per cent to 48 per cent since 1981. This demands a large number of post-literacy materials to satisfy the learning needs and desires of enthusiastic neo-literates who are eager to use their literacy skills.

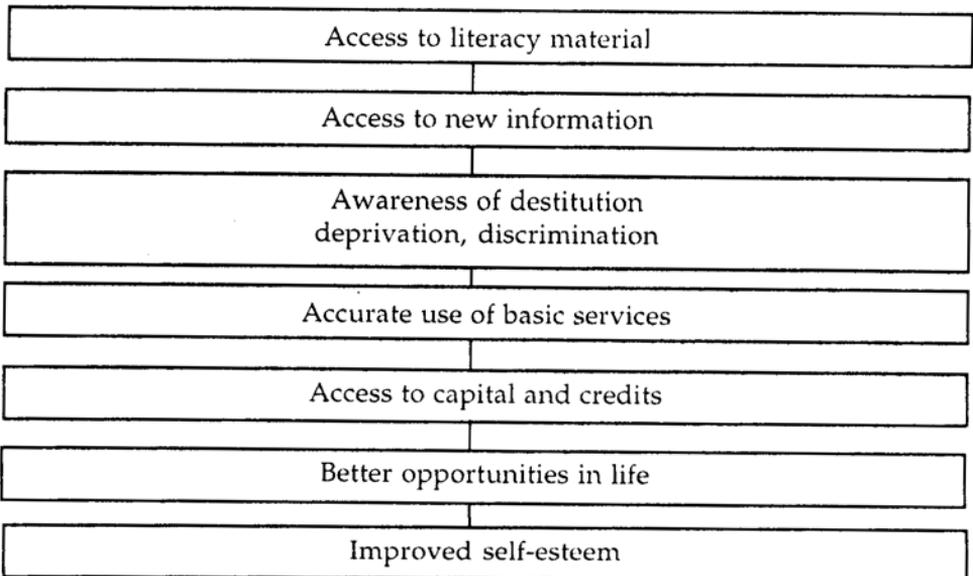
Some INGOs and national organizations developed their own materials to suit the needs of their own learners. One of the studies of CERID (Research Centre for Educational Innovation and Development) has shown that there are altogether 43 organizations who have been producing post-literacy materials for neo-learners. About 350 materials were counted. There was a wide variety of topics ranging from health, nutrition and family planning to income generating skills. Most of the materials developed for the women were also on child-rearing practices, family planning measures, family health and other topics which domesticate them in the socialization process which is already in place in the society. Some materials started to come out dealing with the issue of girl trafficking in the country. However, there were very few materials promoting the value of female literacy, or women's empowerment in the family and the community.

Due to socio-cultural practices in Nepal, girls and women are considered an educationally disadvantaged group. Girls are looked at as temporary family members in their natal homes. The socialization process domesticates the girls and moulds them to serve the male members of the family. As education bears some opportunity cost for parents in the rural areas if not real economic cost, parents prefer the girls to stay home, and help with the household chores. Besides, as they get married off and go to live with their husbands' families, the girls need to be trained to be docile and service-oriented to the family. One study in Nepal has shown that parents believed they needed to spend as much on educating their sons as the family could afford. As there are already various ripples made by development messages in the country, parents thought they did need to educate their daughters. Therefore, education falls into the least priority list for the girls in the rural communities.

Access to education for girls can be opened through various advocacy programmes in the community. There is a great need for awareness-raising programmes in the rural communities, especially in the economically, socially and linguistically disadvantaged group. One of the strongest advocacy programmes is to encourage the women to come to literacy classes, where they should be enlightened on the value of education to women and capabilities of a woman in community development. Second, there should be enough content which deals with empowerment of women in literacy primers, supplementary materials and even in the leisure-time reading materials.

Reading materials that are especially developed for women's empowerment can be a tool for intervening in the existing vicious circle of poverty in the community. Unless women are literate and enter the continuous reader phase, any community will suffer poor family health, malnutrition, and gender discrimination. 'The hand that rocks the cradle rules the world.' Although it is not absolute everywhere, woman is the "hand" that rocks the cradle in many households. Therefore, more literacy materials for women are required to prepare for a 'learning society' in developing countries. Reading materials can boost the self-esteem of the women in the community in the following manner :

**Path to Self-esteem**



Therefore, the need for supplementary reading materials which not only strengthen literacy skills but promote self-esteem and consequently a change in women's status in Nepalese society is evident.

**Post-literacy Materials for Improved Self-esteem for Women**

A recent joint effort of the National Resource Center-Nonformal Education

ACCU/Literacy Resource Center (NRC-NFE ACCU/LRC) and Tulsi Mehar UNESCO Club is a commendable contribution to the field of literacy material development which contains segments of women's empowerment and eventually leads to improved self-esteem. A set of post-literacy materials and advocacy materials for girls and women who are at the middle level of literacy was developed in a workshop conducted jointly by the National Nonformal Education Council at the Ministry of Education/HMG Nepal, NRC-NFE ACCU/LRC, and Tulsi Mehar UNESCO Club in August, 1996. Altogether post-literacy booklets in 3 parts, named *Women Smile* (Mahila Muskuraunchhin), and a poster were developed. The three parts were serially numbered I, II and III according to difficulty. Brief introduction of these materials is as follows :

1. *Mahila Muskuraunchhin* (Part I) : This is a 27-page booklet, which contains 7 different stories on the importance of education for girls and women. It deals with issues like how a woman repents because she already got married and did not get an opportunity to go to school. This book also contains a story on heroic deeds of a woman in the community.

2. *Mahila Muskuraunchhin* (Part II) : This book contains stories which encourage women to be literate even in their old age. It also throws light on some of the factors which are pulling women back in Nepali society. Imparting this knowledge has been made interesting by the stories which were attached with every factor. Another interesting story in this book illustrates the fact that a male member of the family should be enlightened, not only the females, and help make women active and literate in the community.

3. *Mahila Muskuraunchhin* (Part III) : The third part takes a step ahead and deals with empowerment of women through literacy programmes. It shows how a woman can make a choice in a local election, and take up income-generating business to support the family income. It even deals with the fact that an educated girl can return to her village community and provide service for the community development. It also gives a concept of group formation among women to bring positive changes in the community.

4. Posters : The workshop developed a few posters, of which two have already been finalized and sent for mass production. They were *Ke Hamile Yestai Kammaa Maatra Jeevan Bitaaune Ho Ta?* (Are we going to spend our whole life this way?) and *Uddyami Bance Aamdaani Badhaun* (Let's increase our income by entrepreneurship.)

(a) *Ke Hamile Yestai Kammaa Maatra Jeevan Bitaaune Ho Ta?* : This poster shows a woman engaged in different household duties. The purpose of this poster is to raise awareness on the issue that women can do more meaningful work on top of what they are already doing.

(b) *Uddyami Bance Aamdaani Badhaun* : This is a follow up poster for the poster "a." The main objective of this poster is to enlighten the people, that women can adopt many other small business to supplement the family income.

These materials were designed and prepared in the workshop by a group of literacy workers, resource persons and professional artists. As part of the

workshop, the participants themselves went to a nearby village and field tested the materials. Based on the feedback given by the real participants in the village, the materials were revised and presented in their final form.

Two unique strengths of these booklets are that exercise questions are given after every story, so that readers can reinforce what they read and also reflect on the issues; and that the word problems of mathematics are integrated in the same book. Thus, it is a complete package for literacy.

### **Critical Analysis of the Production of Literacy Materials**

Production of any reading material needs to be analyzed not only in terms of content, physical shape and size, but also in terms of accessibility to the actual readers. Literacy materials produced in Nepal are based on the principle of re-inforcement of literacy skills, development of critical awareness, orientation toward values, desired attitude, new information and action. Some of them are purely for entertainment. As mentioned earlier, most of these materials are promotional materials for health, nutrition and family planning. Thus, there is a need for more materials which will trigger the positive role model of the educated female in society.

Most of the materials seemed to be biased to the traditional practices, not only with the illustrations, but also the terminology and concepts. Some of the materials which are purely for entertainment, contain stories which show the dark side of village life and tragic stories. There need to be more optimistic stories which will be more entertaining, but based on real situations in the community.

As literacy programmes are producing neo-literates who are at various stages of literacy skills, there is a need for grading of these materials and producing them according to the need of the neo-literates to make their lives better through reading.

This analysis of available literacy materials in Nepal shows that progress is being made in representing women in different roles in society, leading to women's empowerment. However, continued efforts are required in this area. In addition, there is a need for more production of local context-based materials instead of some experts from the centre of the country producing the material.

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Jayesh Ranjan  
Vimalendra Sharan

## **How Not To Do TLC/PLC : The Ten Commandments !**

An effort has been made to present here what we on the basis of our field experience found lacking in the TLC and PLC programmes. It is not our intention to question the importance of literacy as an integral spoke in the wheel of development of any society, nor to question the relevance of these programmes in achieving mass literacy. Our aim is limited to pointing out some of the defects with the conceptualisation and implementation of the programme which can lead to its lowered efficacy.

We present here our views in form of what we call the 'TEN COMMANDMENTS' of how not to run a programme like the TLC. We have reached these conclusions on the basis of our involvement of over a year with the running of these programmes in Cuddapah district of Andhra Pradesh (PLC) and Nanded district of Maharashtra (TLC).

### **The Ten Commandments**

#### **1. Do Not Make it Only a Collector's Programme**

During the TLC/PLC, it is generally observed that the District Collectors become totally involved in the programme. It becomes a kind of imperative for them to get the programme started, and also to get the programme 'successfully' completed during their tenure in the district. It is very rare that one hears of the TLC/PLC failing in any of the districts.

It is of course true that it is the District Collector, more than anyone else, who has to provide the initial drive and assume the natural leadership role in such campaigns. But at the same time, the Collector has to enable people to take up the mantle upon themselves and lead the campaign forward. For a large scale campaign like this, the momentum has to come from the people and not from the Collector alone. The Collector thus has to withdraw from the direct leadership role after a while and be merely a facilitator.

One strategy of making it a people's programme is to assign important roles to the people's representatives at the grass-roots level. The experience in Cuddapah is quite to the contrary. No role was assigned to Sarpanches, Single Window Presidents etc. Community leaders who were working in the same area were also left out. Useful contribution could have also been obtained from the Mission institutions which are aplenty in Cuddapah, but unfortunately they were not involved in any way with the programme. In Nanded we found that though the Collector was involved with the programme much beyond the call of duty, he had centralized the decision-making process in this programme

to such an extent that a near void existed for quite sometime after his transfer. The junior staff of the district never viewed this as their programme; it always remained a Collector's baby.

## **2. Implementation Not Through Diktats, Orders But Consensus**

If the basic premise that TLC/PLC are essentially a people's programme is agreed upon, then clearly there is no place for diktats and orders in the campaign. Since the objective is to empower the people, all decisions concerning them have to flow from below, and not dictated by the officials. This is one of the most vital factors that distinguishes such campaigns from other government sponsored programmes.

In Cuddapah and Nanded decisions about selection of volunteers, location of the Literacy Centres and the like were left to the Block/Mandal Development Officers (BDO/MDOs). In Cuddapah, for instance, the entire district is divided into 50 mandals and each MDO had to take these decisions about his area. Of these 50, Cuddapah had only 12 regular charge MDOs, while all the others were in-charge MDOs from various line departments like Agriculture, Animal Husbandry etc. The latter clearly lacked a development- and people-orientation. Activities like the PLC were seen by most of them merely as another routine 9 to 5 job. So, when asked to take crucial decisions concerning volunteers, Literacy Centres etc. in consultation with the people, what most of them did was to merely replicate the pattern followed for the TLC, which had taken place earlier. This was obviously the easy way out, for consultation with the people would have necessitated going into all the lacunae and defects of the arrangements for the TLC, and a need to correct all of them.

## **3. Do not Start the Programme till Groundwork is Over**

Two kinds of preparatory work are very essential before the TLC/PLC is begun. The first of these is to convince all others about the utility of the programme. It is the general experience that apart from the Collector himself, none other in the official machinery is sharing the same motivation and enthusiasm. Most of them see it as a passing fad of the Collector, which has to be withstood to keep him in good humour. They call it the Collector's programme instead of 'their' programme, which is symptomatic of the way they feel about the whole thing. Ultimately, this is very counterproductive, for it is the very Revenue and Development officials who are assigned the important tasks of supervising and monitoring the programme. The lackadaisical attitude of the MDOs in Cuddapah might have been quite different had some attempt been made to inculcate a sense of involvement and partnership in the programme.

The second factor to be covered before the campaign actually begins is about the resources. The hardware has to be in place fully before the inputs should actually begin. Nothing can be more demoralizing for the learners than to find that the centre is in complete darkness, or the learning material has not

yet been distributed. Contingency planning regarding all the resources is also to be included within the groundwork. At times, absence of such backup plans can be acutely felt. In Cuddapah, for instance, it was assumed that the local community will provide all the lighting requirements of the centres. When this did not happen in various places, a lull resulted for almost a month in those places, before it was decided to release some money from the Gram Panchayat funds to buy kerosene/bulbs and wires etc.

In Nanded, a peculiar situation arose when after the environment building phase which had generated a wonderful response with about six lakhs enrolling for the programme, the primers did not arrive for the next three months causing lot of disillusionment with the programme.

#### **4. Do not Use Learning Material Without Local Flavour**

For TLC/PLC, many districts tend to follow the primers developed at the State Resource Centre. This was done at Cuddapah and Nanded too. It must however be borne in mind that generally large regional disparities exist in culture and lexicon within a state. In AP, for instance, Telangana is quite different from the coastal areas which in turn are quite different from Rayalseema. These differences are both in terms of the Telugu dialect followed, and more importantly, about the relative importance of the issues people assign in these areas. Thus, the content of the primers should capture these local flavours. This is a sureshot way of getting the learners involved in the learning process. As an illustration, we suggest that when primers are being prepared for a coastal area the lesson, instead of starting with land and such issues, may start with things concerning oceans. Also, the demand for primers in a particular language, especially the tribal tongues should be by and large accepted. Administrative convenience should take a back seat in such circumstances.

#### **5. Environment-Building should not be a One Time Affair**

The usual practice in TLC is to have an intensive environment-building campaign 2-3 months (or more) before the main programme actually starts. Thereafter, no such exercise is taken up again. But the general experience in the districts points to a dire necessity for taking up subsequent doses of environment-building also. In Cuddapah, for instance, the PLC literacy centres started functioning in the month of January. February, however, coincided with the main harvesting season there, while March was the month which saw Board examinations for Classes VII and X, with which all the teachers and other volunteers were preoccupied. Thus, within one month after the opening of the centres, attendance practically dropped down to 5 per cent, which became very demoralizing for everyone. It was thus an ideal occasion for a second round of environment-building exercises, which would have sustained the enthusiasm of the learners and the volunteers.

Another opportune and necessary time for carrying out the environment-building exercise is the gap between TLC and PLC. Often this gap is large

enough to make neo-literates lose their enthusiasm and motivation for the PLC. In Cuddapah, this gap was an incredibly long one and half years.

A point which might be considered here is a reduction in the time gap between the TLC and PLC. As of today, once the TLC is over, the district applies to the NLM for permission to start the PLC. The time taken by the NLM to review the achievements of TLC and sanction the PLC is quite long. It is our submission that the TLC performance should be evaluated concurrently with the programme, so that the PLC can be sanctioned immediately on the completion of the TLC. A neo-literate is like a young sapling which cannot withstand lack of watering for a long stretch of time. As it is futile to expect a plant to grow back after depriving it of water for a long time, it is illusory to expect a neo-literate to retain his interest in literacy and education if he is left uncared for many months while the NLM takes its time to sanction the PLC.

#### **6. Do not Bite More Than What You Can Chew**

Like other government programmes, there is a tendency in TLC/PLC as well to introduce targets, thereby making the programme very cramped. There is now enough experience available from IRDP, Family Planning etc. to point to the futility of such an approach. One is reminded of the malaria inspector, whose primary concern is with how much DDT has been sprayed. Literacy campaign, by its very nature, has to follow a different approach from that of the malaria inspector. A prelude to this is not to have very ambitious targets at all, which cannot be realized for all practical purposes. For example, the aim of TLC in Cuddapah was to make literate 6.47 lakh learners in the age group of 9-35 years with a host of attendant benefits. However, after the campaign was concluded, only 3.21 lakh people could be made fully literate as per the norms, and 1.5 lakh learners semi-literate. A large number of 1.76 lakh people could not be made literate for various reasons. When the PLC was taken up, this illiterate population was completely left out in the scheme of the things.

A similar situation was seen in Nanded where one third of the population in the age group of 45 to 65 years, which was proposed to be covered initially were finally completely dropped in the TLC.

#### **7. Do not Give any Place to Greed in the Programme**

A programme of the nature of TLC/PLC can only run successfully with an element of selflessness and volunteerism in everyone. Despite continuing debate about the place of incentives in this programme, field experience shows that self-interest and greed go on to destroy the programme. A quid pro quo mentality sets in, and unless this greed is satisfied, the programme fails to get ahead. Most often, this results because of a wrong choice of people for the various tasks.

In Cuddapah, the task of monitoring the functioning of Literacy Centres was assigned to the teachers of Mandal Praja Parishad (MPP) Schools. Their selection in the first place was not voluntary, but as per orders of the MDO

who exercises supervisory authority over these schools. Moreover, the MPP teachers have various grudges and long-pending demands of their own. They are also highly unionised. Most of them saw TLC/PLC as an opportunity to further their own ends. The Collector and other higher officials would be besieged with demands of interest-free vehicle loans, off-days from schools and the like.

The creeping in of greed in the programme is also a logical corollary of following tight and narrow targets. The usual practice is to distribute these targets among the various functionaries. Once one of them achieves his target, he starts looking up to the Collector to keep his end in the bargain. If success criterion is merely the achievement of certain targets, then it becomes very difficult for the Collector to refuse also. In Cuddapah, this was usually the rallying point for the school teachers to get their demands across to the Collector.

#### **8. Do not be Rigid; Mix and Match TLC with PLC**

The distinction between TLC and PLC seems to be an artificial one, if the field experience is to be borne in mind. Normally, the TLC after its conclusion, leaves a large number of people who remain completely illiterate, as happened in the case of Cuddapah. Once the PLC commences, it focuses exclusively on the neo- and semi-literate learners of the TLC. No literacy is imparted to those who have missed it completely during the TLC. This section can be a substantially a large number at times, as was the case in Cuddapah (1.76 lakh people). Completely ignoring such a large section can have its own demerits. For one, such a section, if sufficiently volatile, can actually discourage and prevent others from joining the PLC, some instances of which were actually reported in Cuddapah.

When a social programme like the PLC has to be marketed for greater learner involvement, the target population ought to be segmented to include the continuing illiterates also. It is in all fairness to make literacy accessible to them once more, which they might have missed earlier for reasons beyond their control. Thus, a mix of TLC with PLC should be followed, to be matched with the requirements of different categories of learners.

#### **9. TLC/PLC not at the Cost of Regular Administrative Work**

While TLC/PLC are noble ends by themselves (or noble means to an end), they get resented by the official machinery if they interfere too much with regular administrative work. In the long run, it is also harmful to the system. In Cuddapah, for instance, it is said that during the TLC, the only job of the Revenue and Development staff was to prepare and distribute food packets to the volunteers day in and day out. This is also used very often as a pretext by the officials for the non-performance of their regular tasks. On many occasions, it also leads to the common people developing a very negative image about the literacy programme. If for instance, a village from a far-off place comes to meet some Revenue official and every time he is told that the official has gone

for some literacy-related work, it is bound to leave him with very unfavourable impressions.

In Nanded many an officer was seen shirking his work under the guise of being on tour in connection with the literacy classes. It is a different story that most of these classes are being held in the evenings only. This attitude becomes more visible with the approach of the external evaluation time. It is also possible that the Collector just might condone the negligence of office work by his subordinates to keep them in good humour so that his literacy programme does not suffer.

#### **10. And Finally, Do Not Cheat**

From a reading of this paper it might seem as if the programme is a total failure in the two districts reported about. This, however, is not the case. There is much to the programme that deserves commendation and praise. The programme has served as a great awakener of the people. It has gone a long way in empowering the participants. These and many other aspects of the programme deserve kudos. Our effort here has been only to bring out some of the defects/difficulties in the conceptualisation and implementation of the programme at the field level so that corrective action could be taken to make TLC and PLC greater successes elsewhere.

**Meena Hariharan  
I. Ramabrahmam**

## **Total Literacy Campaigns : Their Social Impact A Case Study of East Godavari District**

Promotion of literacy is the major goal of the Total Literacy Campaign. Literacy and education are interdependent. Literacy, through its content, cannot but create general and specific awareness of a number of social issues; bring about attitudinal changes among the people and generate in them an urge for change from the existing practices and system that stand as hurdles to social development.

Movements like the anti-arrack agitation in the Nellore District in early 90s are cited as the by-products of literacy. Though the cause and effect positions of literacy and socio-economic changes are much debated, the fact that literacy casts a positive social impact remains undisputed. Only when this takes place literacy campaigns can create a self-perpetuating situation where a mutually reinforcing process simultaneously promotes literacy and social change.

It has been observed by the Directorate of Adult Education, Government of Andhra Pradesh, that the Total Literacy Campaign has a number of social outcomes such as increased enrollment and decline in drop-out rates in primary schools, increase in savings, positive thinking on gender equality and women empowerment, adoption of small family norm and decrease in fertility rate, increase in immunisation of children, heightened awareness about social forestry Joint Forest Management (JFM) and an overall increased involvement in developmental programmes. (Directorate of Adult Education, Government of Andhra Pradesh : Document circulated at a meeting of the Deputy Directors of Adult Education dated 21.1.1997).

### **Method**

In order to understand this, a Social Impact Test (SIT) was devised and used on a sub-sample of 132 learners spread over five Mandals of East Godavari District, one of the 23 districts in the state of Andhra Pradesh which implemented TLC. This was a part of the study of evaluation of Total Literacy Campaign in East Godavari District where the size of the main sample was 8,500 neo-literates. The SIT was developed to study the social impact of the Campaign and was tested on a sub-sample.

The SIT consisted of a questionnaire having three parts. The first part consists of 22 questions measuring the social awareness of certain simple principles related to health, hygiene, savings, and certain social rights which are discussed in primers. This was intended to test the extent to which the

learners received and followed the social messages through the primers to contribute to their knowledge repertoire.

The second part aimed at understanding the cause of these changes. The objective of this was to isolate and compare the role of TLC in bringing social awareness and practice vis-a-vis the other influencing factors, like media, health campaigns etc. The second part was a projective questionnaire having ten situations concerning the same areas covered in the first part.

The SIT was a modest attempt to isolate the contribution of each factor. The situations were described in the form of stories, each of 4 to 5 sentences length. These stories described a perceptible change in the behaviour of a character. The behavioural changes highlighted ten different social aspects. At the end of each story, four possible-influencing factors for the said change were suggested. The respondents were asked to identify one of the four factors which was most likely to have brought in social change in the character described in the story. It must be mentioned here that one of the four factors suggested was invariably "Akshara Godavari" (the banner of the Total Literacy Campaign in East Godavari District). However, in order to break the response set the serial order of Akshara Godavari is changed for each of the ten items. The questionnaire would get a total score and mean score of influence of TLC on each social area.

Any intervention programme is expected to lead to social change. While the demands of time and circumstances account for change, influence of innumerable other factors cannot be discounted. Sometimes change in policies effected by the government (such as economic liberalisation bringing with it large scale private and foreign investments) are bound to bring about a sweeping change in the economic scene. Similarly, certain policies in the realm of health like immunisation through polio plus helps in creating awareness of the practice of preventive measures. Judicial activism contributes to upholding the law. Change towards progress, therefore, is a continuous process flowing from several sources. So, before attributing the cause to any factor, it must be isolated.

Part three of the questionnaire consisted of ten concepts selected from the primers for which the meanings were sought. This part was included to test whether the social message loaded in the primers reached the clientele group. In other words, the third part measured the role of the primers in creating social awareness among the learners.

## **Results**

Though the sample size may appear small, the results have helped in measuring awareness and practice of individuals, and have indicated a positive social change. An attempt was made to compare and contrast this with the individual's attribution of it to Akshara Godavari.

The team attempted to measure change and its causal factors for the major areas such as socio-economic sphere, the field of health and hygiene, legal

education. What follows is an analysis of the modest study which welcomes suggestions for methodological refinement. The results of parametric tests are presented in the tables. Analysis of variance (ANOVA) has been done first to find out if there is any significant difference between the groups. Further, for those variables that showed significant difference in ANOVA, Duncan's Multiple Range Comparison Tests were done to find out which specific combinations among the groups differ significantly.

Table 1 presents the results of ANOVA and Duncan's Multiple Group Comparison Tests both for the social awareness and practice on the left column and the extent on the right. The Table presents the mean values of awareness and practice, mean impact of Akshara Godavari, values of F with their probabilities, the difference of impact in the four areas for awareness and practice as well as the impact of Akshara Godavari. The asterik mark (\*) indicates differential impact in four areas in awareness and practice, while a Pt indicates differential impact in four areas as a result of Akshara Godavari.

**Table 1**  
**Differential Impact of Four Areas of Social Change**

| <i>Areas of Change</i> | <i>Changes in Practice</i> |             | <i>Changes due to AG</i> |                           |            |             |
|------------------------|----------------------------|-------------|--------------------------|---------------------------|------------|-------------|
|                        | <i>Mean</i>                | <i>Mean</i> | <i>Socio-<br/>Eco</i>    | <i>Health<br/>Hygiene</i> | <i>Law</i> | <i>Edn.</i> |
| 1. Socio-economic      | 62.7                       | 48.5        | -                        | Pt                        | *          | -           |
| 2. Health & Hygiene    | 90.9                       | 28.2        | Pt                       | -                         | Pt*        | Pt          |
| 3. Law                 | 95.4                       | 43.4        | -                        | -                         | -          | -           |
| 4. Education           | —                          | 83.2        | Pt                       | Pt                        | Pt         | -           |

F = 157.6      F = 46.6  
P = <.001      P = <.001

- Note : 1. Log transfer is done only to test the significance.  
The means are absolute values.
2. '\*\*' indicates impact differences in awareness and practice ; while 'Pt' indicates impact differences of Akshara Godavari Campaign.

Looking at the scores on awareness and practice, it is noticed that the awareness is relatively more in case of legal aspects (mean=95.4), but its attribution to Akshara Godavari is relatively less (mean=43.4) occupying a third position. It may be pointed out here that the main question on this aspect is the marriageable age for boys and girls. While the primers included one topic on this, the role played by electronic media cannot be ignored. The documentaries and advertisement spots on T.V. perhaps are more appealing and impressive for the learners to create in them an awareness in this regard. In the area of education, Akshara Godavari's role is seen as very prominent (mean=83.2). It is not measured for awareness and practice. It is highly interesting to observe from the table that in so far as awareness and practice are concerned, there is a

positive change in socio-economic sphere (mean=62.7) which is significantly lower than in the other areas. But the same is not true while examining the role of Akshara Godavari. Here, the mean score (48.5) is positioned second. This indicates that, whatever changes are noticed in socio-economic sphere in terms of awareness and practice, these are largely due to the Akshara Godavari Campaign.

It is necessary to point out here that for awareness and practice the types of questions in this area are related to equality in wages for genders, saving habits, appropriate reaction to cheating in fair price shop etc. Such drastic changes in terms of mass protest are not yet common. However, the source of awareness of such rights is the primers used in Akshara Godavari as also recent publications by ZSS entitled 'Women and Law,' and the like. Hence the response while reflecting a lack of practice cites Akshara Godavari as the source of information. It needs to be mentioned in this context that the actual impact of the materials evolved as part of post-literacy programmes needs to be assessed properly. According to the Convenor of the Academic Committee of ZSS and the Correspondent, Ideal College, Dr. Chiranjeevini Kumari, emphasis on awareness of issues relating to women was so much that the primary goal of literacy seemed to have been relegated to the second position leading to a piquant situation of several men dropping out of the programmes. (Interview with Dr. Chiranjeevini Kumari on 4.2.97).

Another interesting phenomenon that can be noticed from the table relates to the sphere of health and hygiene. The table reveals a significant positive change in the awareness and practice relating to health and hygiene (mean=90.9) but almost negates the role of Akshara Godavari for such change (mean=28.2).

It reveals that Akshara Godavari has limited impact on this social sphere. This is understandable, because, while a wide range of publicity through electronic media, and target-oriented welfare programmes like immunisation, family planning etc. are in vogue, the intervention of Akshara Godavari is perceived only as a literacy programme aimed at bringing a positive change in education (mean=83.2) i.e., increased enrollment and decline in drop-out rates. In short, while learners have more knowledge and practice of legal, health and hygiene aspects due to factors other than Akshara Godavari, Akshara Godavari alone seems to have had a higher influence in the spheres of education and socio-economic status.

Table 2 also depicts the percentage of neoliterates for each Mandal on the first column. It may be observed from here that in Pithapuram, Rajavommangi and Mummdivaram where the percentages of neoliterates are 49.2, 48.6 and 43 per cent respectively, the social impact is also high (83.01, 84.34 and 84.13 respectively). This indicates that a close relationship is absent in the case of Kadiyam where the percentage of neoliterates is found to be the highest (52) per cent but the social awareness and practice score is low (78.17). Another important observation is that, while the literacy rates are found to be related to social awareness and practice, there is an absence of positive correlation between

**Table 2**  
**Social Impact Across Mandals : Difference**

| <i>Sl. Mandal No.</i> | <i>% of NLS</i> | <i>Awareness &amp; Practice</i> | <i>Role of AG Mean</i> | <i>Pitha-puram</i> | <i>Rangam-peta</i> | <i>Kadiyam</i> | <i>Rajavommangi</i> |
|-----------------------|-----------------|---------------------------------|------------------------|--------------------|--------------------|----------------|---------------------|
| 1. Mummidivarm        | 43              | 84.13                           | 54.62                  | Pt                 | *                  | *              | Pt                  |
| 2. Pithapuram         | 49.2            | 83.01                           | 36.04                  |                    | *                  | *              |                     |
| 3. Yeleswaram         | 26.9            | 80.65                           | 53.25                  | Pt                 |                    |                | Pt                  |
| 4. Rangampeta         | 19.02           | 77.32                           | 42.45                  |                    |                    |                |                     |
| 5. Kadiyam            | 52.0            | 78.17                           | 42.05                  |                    |                    |                |                     |
| 6. Rajavommangi       | 48.6            | 84.34                           | 29.32                  |                    | *                  | Pt             |                     |
| Total                 |                 | 81.00                           | 42.91                  |                    |                    |                |                     |

- Note* : 1. Long transfer is done only to test the significance. The Means are absolute values.  
 2. '\*' indicates impact differences in awareness and practice; while 'Pt' indicates impact differences of Akshara Godavari Campaign.  
 3. NL = Neoliterates.

literacy and the role of Akshara Godavari. The above two observations suggest that an increased literacy is the product of increased social awareness but not vice versa.

In conclusion, it can be said that the campaign mode of bringing literacy definitely leads to change, which is slow and more often the gains are ephemeral in the absence of an effective post-literacy programme. One grey area begging for immediate attention is the learning process in unorganised groups. Unlike structured/formal education, the process of learning in groups appears to be lacking in adult education centres, due to factors unnoticed till now.

G.P. Jain

## **Climbing A Tree To Catch A Fish Wrong Assumptions of Adult Literacy Planners Must Go**

To counter the awesome spectre of multiplying adult illiteracy triggered by heavy primary school drop-outs, we in India need a quick, easy and cost-effective literacy programme, may be even a crash course yielding fast results. But, first, some wrong assumptions that have long enchanted our planners immobilizing them, must go. Without discarding the unwanted assumptions, Government of India's wish to generate total literacy by the turn of the century is as quixotic and unachievable as climbing a tree to catch a fish is.

The first such assumption, perhaps the most flawed, is that willing volunteers will be found to teach illiterate adults for 200 hours (an hour a day) spanning nearly a year without payment. The sad reality is that voluntarism is by and large dead. See our elected representatives and bureaucrats who let go no opportunity to make a run on Government treasury for umpteen perks, all for discharging efficiently their public duty! With what valid justification can the unemployed youth be asked to give of their time and energy without payment for a year as a 'patriotic duty'?

Those joining in the first flush desert soon after and the programme collapses and colossal money is wasted. 'Captive' school children of classes 6, 7 and 8 with no motivation or skill to deal with adults are ineffective substitutes. Teaching is either suspended or a charade is kept going. A way out of this imbroglio is to invite the educated unemployed in towns and villages to take up adult teaching as part-time or whole-time work for a fee (or, call it incentive).

Ensuring a return for their labour or income-generating employment for a short while during summer months will make many a senior school and college student enlist cheerfully as teachers, who will neither play truant themselves nor allow their learners to do it. In fact, they will make utmost effort to cajole and corral the learners to the classroom.

The second wrong assumption is that poor adults weighed down by their daily grind have the leisure and will to attend the class every day for a year, knowing literacy will bring them no immediate monetary gain. This preposterous assumption has to go and a short course (like the *60-hour Gyan Samaj course* for basic literacy) or even a *30-hour crash course* is structured to secure outdistancing of illiteracy by literacy expeditiously. The gravity of our problem can be gauged from the disheartening fact that more millions are added to the illiteracy scoreboard than the millions scratched out from it every year. For example, the number of illiterates (excluding 0 to 6-year-olds) rose from 305.31 million in 1981 to 328.88 million in 1991.

Awareness, literacy and functionality are postulated as three goals of a sound literacy programme. Awareness will go in tandem with basic literacy and functionality will follow literacy. Illustrated rapid readers on diverse subjects may be given to neo-literates, enabling them to further hone their skill and become functionally literate as well, useful to their families, society and country.

UNESCO has also set its sight low when it defines a literate person as "one who can, with understanding, both read and write a short, simple statement on his everyday life." Such moderate level of literacy is achieved comfortably by the 60-hour Gyan Samaj Course.

The third wrong assumption is that adults will not look upon 'learning by rote' with apathy and as hurtful to their adult pride. Having failed to learn by the rote method in his childhood, the adult is deeply distrustful of it. His self-esteem is punctured on having to learn like his children. A new method, therefore, appropriate to a mature person must be designed. An illiterate speaks the language fluently and has a large vocabulary, but cannot identify the alphabet's contours. If the contours are equated with familiar objects, similar in shape as well as sound (that is, 'learning by association'), it will not take long for an illiterate to become literate.

For Hindi, Gyan Samaj has perfected this technique to fabulous advantage. It equates each letter of the alphabet, consonant as well as vowel, with a known object, similar in shape and sound. As soon as a learner looks at an alphabet he knows what it is, because the contours of the object he knows and the letter he wants to know are similar. The known leads him effortlessly to the unknown. He does not have to jog his memory or rack his brain to do the identifying for him. Besides, learning in this manner gives him instant confidence that the 'old parrot' will learn and learn fast.

The fourth wrong assumption is that learning to read and write without arithmetic is not literacy. No doubt, arithmetic is an important input, but it can be deferred to the post-literacy phase. Brain-teasing arithmetic taught with alphabet slows down learning in both the areas and causes many an adult to drop out midway. After an adult has begun to read and write facilely, he will become his own canvasser and himself ask for arithmetic and more.

The corridors of adult literacy administration are presently abuzz with soft sounds of the acronym IPCL ('improved' pace and content of learning), but after the wrong assumptions are discarded and corrective action is taken, adult literacy will move into the fast lane and resound with joyous shouts of another acronym APCL ('accelerated' pace and content of learning).

Uttar Pradesh's Agra district claiming to be the first in the entire Hindi-speaking belt was declared totally literate (having achieved 70 per cent literacy, that is, 2,90,000 men and women out of 4 lakh illiterates made literate) after 15 months from February 1993 to April 1994 cannot be accepted as a role model for the other Hindi-speaking districts. Fifteen months is too long a gestation period, while a comparable level of literacy is achievable through an innovative

teaching method in less than three months at less than half the National Literacy Mission's allocation, without fear of a slide-back.

An experiment was begun with a controlled group of 20 illiterate life convicts in Prison 2 of New Delhi's Tihar Central Jail on 1 February 1994. After counting out the closed days, February yielded 23 teaching days, March 25 and April 12 days, consequent on suspension of teaching during a 15-day 'Vipassana' camp in the jail. On 30 April, seventeen out of 20 learners could read facilely not only the last lesson of their primer, but any printed material in bold type. Three learners struggled heroically, but clearly needed more time. So also did the writing proficiency need more honing. It is being upgraded in the 60-hour post-literacy phase, at the end of which at least 12 learners will become teachers deployable in other sections of the sprawling Tihar Jail.

It is gross misuse of precious time and money to accomplish in a year or more what can be achieved in 60 days! An estimate of the enormous saving effected by a quick-delivery method can be gauged from the fact that more than 50 per cent of the national effort for removal of illiteracy would have to be made in the Hindi-speaking areas for which the new innovative method is suitably tailored.

### **The Method**

The new method has only one primer of 40 pages by which both reading and writing are taught. Learners are asked on the very first day to use 'matras' to make short words and phrases. They are told 'matras' are like the cement that binds the bricks and holds the structure together. What purpose is served is beyond me by withholding the use of 'matras' until the beginning of the second of the three IPCL approved primers of Jamia Millia Islamia State Resource Centre for Delhi. Primer 1, which is completed in nearly two months, gives no clue whatever to the learner how to make words and sentences by using the 'matras.'

A piquant situation arises when the learner can read and write आम, but cannot read and write राम, because he has not been taught the 'matra' ठ. Similarly, he may read and write इधर, but cannot read and write किधर, because he has not been exposed to the 'matra' ङ. Again, he may read and write उधर, but cannot read and write सुधर, because 'matra' ञ is still Greek to him. Two months are filled up with learning only the consonants. Learners denied the thrill of building new words and sentences by joining the 'matras' with the consonants soon begin to find the classroom boring and many of them walk out, never to come back.

Contrarily, Gyan Samaj's one and only primer on the very first day taught the learner two consonants न and प and a 'matra' ठ. The consonants are equated with familiar objects नल and पंखा, and 'matra' ठ with डंडा, all similar in shape as well as sound, rendering grasp and retention easy and effortless. It makes for learning by sight, not by rote. Well acquainted with the contours of नल, पंखा

and डंडा, the adult illiterate took little time to identify the unfamiliar three न, प, and ।. As one may note, the learning order was reversed. The learner did not learn in the traditional way from न to नल, but untraditionally from नल to न. That is from what he already knew to what he was learning to know.

### The First Flush

On the first day itself, the learner was encouraged to place the 'matra' । after न to make न। and after प to make प।. One न। joined with another न। made the word नन। and प। written twice produced the word पप।. A first flush of pride illumined the wizened face as the conviction grew on him that the 'old parrot' could read and write, that too on the first day of schooling. There was now no going back for him. His appetite whetted, he asked for more and more. Dropping out by him in mid-course was out of the question. Recognition of the alphabet with the aid of familiar objects similar in shape as well as sound was near immediate and enduring.

On the *second day*, the learner was introduced to two more consonants म and ल and invited to make new words by joining them with 'matra' ।. A new vista of word-building opened before him and he learnt playfully by making several words with four consonants and a 'matra.' Two more consonants क and त on the *third day* and still two more consonants द and ग on the *fourth day* were introduced.

Following this, lesson 5 containing four dozen words made with the eight consonants न प म ल क त द ग and 'matra' । became the learner's favourite playground. He was encouraged to make words of his own with the eight consonants and one 'matra' through the next three days.

In the *second week*, four more 'matras' ि िु िुु िुुु, identifiable with familiar objects similar in shape as well as sound, were introduced and the learner was led to read new words made with the previously learnt eight consonants and five 'matras.' Matra ि identifiable with छड़ी placed on the left of the consonant was called the small ि, left being weaker, and placed on the right was called big ि, right being stronger. Similarly, 'matra' िु identifiable with जूला placed at the bottom of the consonant tilting to the left was called small िु, left being weaker, and tilting to the right was called big िु, right being stronger.

### Revision Lessons

In the *third week*, the remaining five 'matras' िुुु िुुुु िुुुुु िुुुुु िुुुुु also identifiable with familiar objects similar in shape as well as sound, were introduced and the learner was taught to read and write words made with the eight consonants and 10 'matras.' Lesson 11 of the primer marked the first watch-out on the fast sprint to literacy. This lesson, containing sentences made with only eight

consonants and 10 'matras,' served as the first revision lesson for what had been learnt till now.

In the *fourth week*, the learner learnt to identify the next block of eight consonants ब व ज ह र स ट च (two a day) all equated with familiar objects similar in shape as well as sound, and make new words by joining them with the 10 'matras' already learnt. A second revision lesson was provided by lesson 16, containing word-combinations of 16 consonants and 10 'matras' only.

Into the *fifth week*, and another block of eight consonants क ख ट श घ ध भ ङ, identifiable with familiar objects similar in shape as well as sound, was introduced and followed by lesson 21, containing word-combinations of 24 consonants and 10 'matras' only, which served as the third revision lesson.

In the *sixth week*, the learner learnt to identify the last block of seven consonants थ य ड ङ ढ ढ झ with the aid of familiar objects similar in shape as well as sound.

Lesson 26, containing sentences made with all the 31 consonants and 10 'matras,' served as the last check-point.

In the *seventh and eighth week*, the learner was taught half consonants, combined consonants and vowel letters अ आ इ ई उ ऊ ए ऐ ओ औ अं, completing the learning schedule. What now remained was practice and more practice. The learner was given rapid readers printed in big letters which he began to read as fluently as the last three lessons of his primer. In fact, he was ready to cope with any reading in bold type.

### **Student Instructors**

Since the Gyan Samaj method completes the teaching in 60 days, school-going students may be pressed into service as volunteer instructors during their summer vacation. Government may, by way of providing part-time summer jobs, decide to give each instructor a small stipend for every adult made literate, triggering a healthy competition among the student instructors. In that event, Government may not have to employ an expensive monitoring agency.

Learning to read and write by Gyan Samaj method is much easier, in fact, full of fun. It is completed much faster and the cost to Government is much less. There is no fear of a slide-back either, because the objects with which the letters of the alphabet are equated keep popping up before the learner in his everyday living. He cannot unlearn what he has once learnt.

If an expert finds some of the images of objects equated with the alphabet as far-fetched or contrived, may it be remembered that the core benefit of this quick-delivery method is not a whit diluted. Bumper gain is still available to the learner and the nation.

Gyan Samaj's innovative method draws on the Laubach method of literacy, which borrowed its essentials from the method popular in the 'forties in the

tiny state of Aundh in Maharashtra. The Laubach method did not strike roots in the Hindi-speaking state of Uttar Pradesh where it was tried, because 'matras' had been left unequated with familiar objects. Gyan Samaj has attended with deliberation to the crucial 'matras' without which no word-building is possible. Hence all the 10 'matras' are also equated with familiar objects similar in shape as well as sound, rendering learning easy, fast and economical.

To sum up, basic or sustainable literacy can be transmitted in 60 teaching days at much less cost to the public exchequer without fear of a regression. The method has vast potentiality in the context of Government's "Education for All by 2000 AD" programme. This method may well be termed as belonging to APCL (accelerated pace and content of learning) genre.

**Mushtaq Ahmed**

## **Our So Called Word Method Primers**

The strongest reason for using the so called word method of teaching was that in the days, when the Janata Government came to power, we were highly influenced by the thinking of Paulo Freire. The basis of his method of teaching was discussion, so that the learner starts questioning the world around him—Why his condition of life is miserable, who is responsible for it, and what can be done about it. He becomes critical of the establishment which is generally responsible for people's predicament. This is why Paulo Freire took the stand that an adult educator cannot be neutral—either he is for the establishment or against it.

Perhaps we did not fully understand his philosophy, according to which such messages and/or key words should be selected which can generate serious and meaningful discussions about the conditions of learner's life and make him aware of the political, economic and social impediments facing him. We also overlooked the fact that such discussion-oriented-revolutionary methods do not start with isolated-lifeless-neutral-words but with a stirring message in a sentence or a phrase, which has in it word or words 'key' to the message. This key word is broken into its components (letters) later on, after the message has been driven home through discussion led by capable 'animators.' Take, for example, the Cuban Literacy Campaign. A large body of urban youth had moved into the mountains to serve as underground guerrillas and fight the enemies of the Reform. To help them and to teach the farmers reading and writing, incidentally, an equally large body of educated urban youth also disappeared into the hills. The organisation of American States Cuba, prepared the primer. It focussed on the Agrarian Reform, which effected the lives of the peasants and was almost the battle cry of Fidel Castro. The very first lesson in Primer I starts like this :

'La Reforma Agraria nacio en la Sierra  
La Reforma Agraria da tierra a los campe sinos  
La Reforma Agraria avanza.'

(The Agrarian Reform was born in the Mountain. The Agrarian Reform gives land to the peasants. The Agrarian Reform marches on.)

After fully discussing the above revolutionary message and repeating the key word 'La Reforma' 3 times, exercise 1 starts to teach the vowels :

Let us read  
La reforma agrara  
La re-for-ma  
la le li lo lu

This is the 'whole' or the 'global' method, with the 'key word' 'La Reforma'

in it. A stirring and gripping message first, followed by the teaching of the small units i.e. the word and the letters.

What do we have in the name of 'word method,' which will generate serious discussion? A copy of lesson one of the primer prepared by Deepayatan, Patna, is reproduced here.

Perhaps no discussion can start on such a lesson. The foreman-teacher in the Bawana Sugar Mills, who was well educated, wanted to try out the method as he was trained to teach. He took lots of pain to draw the picture on the black board so that every one could see. To start a discussion on 'makan,' he asked the question, "What is your house made of?" Prompt came the retort, "You should know it yourself. It has been built by the company and allotted to us." Similarly some workers objected "Why are you starting with म, and not अ, आ?" Other key words are much more difficult to generate any meaningful discussion like Kathal, Baigan, Hal, Bail, mostly because they are 'neutral' words, unrelated to any serious political, economic and social problems of the learners.

In the manner the word method primers are being prepared, they have become pedagogically unsound. Technically a 'key word' must be made a 'sight word' first i.e., the learner recognises it as a whole, then it is broken into its components. In this manner, the principle of teaching the unknown (i.e. the letters) from the known (i.e. the word) remains intact. In these word method primers, since the key words are not made 'sight words,' we are violating this principle. We are teaching the unknown (i.e. the letters) with the help of the unknown (i.e. the word). Another irony of the method is that though we call it word method, what we are teaching is not the word, but the letters! What we are teaching is म, क, ल, न and not मकान. It is the same as teaching अ, आ, इ, ई. So in fact it is a letter method.

मकान has not occurred sufficient number of times, in a meaningful text, to become a sight word like 'La Reforma' in the Cuban primer, or 'Kalam' in Shaligram Pathik's primer. In this well-known primer 'Kalam se perhenge,' 'Kalam se likhenge' has been repeated at least 10 times. It has become a sight word, then it was broken into क, ल, म and the letters taught.

Before choosing the method we should also have remembered that we are using these primers in a mass campaign. We will need thousands of volunteers to teach, most of them students. Would they be in a position to initiate and sustain a discussion on the serious problems of life facing the adult learners?

Some of us claim that the adults do not like the letter method. This is ludicrous. The facts are other way round. It is a common experience that the learners demand for 'Qaida' (letter method primer) and to satisfy their demand the teacher buys a letter method chart from the market and teaches the letters first. He also finds it much easier to teach a letter method primer.

Two studies\* (CENDIT, 1990 and Mushtaq Ahmed and Srivastava 1994)

\*CENDIT, *Not Just Another Statistic*, DAE, 1990

**Mushtaq Ahmed-Srivastava**, *A Comparative Study of the Analytic and Synthetic methods of Teaching*, 1994, DAE

have clearly shown that the letter method gives much better result than the word method to teach a language having phonetic orthography like Hindi.

Then why are we so enamoured about such a weak method to teach Indian languages? It so happened that at the time we were launching the campaign, the Directorate of Adult Education (DAE) had prepared a primer on the so called word method. The DAE was the guru of SRCs; so they copied their guru. The SRCs were the gurus of ZSSs, so they copied their guru. None of the SRCs or ZSSs, to the best of my knowledge, carried out a systematic comparative study to see which teaching method works best in our circumstances. We did not question, we did not analyse and we did not gather feedback. We follow the path of least resistance. Just copy and no eyebrow will be raised.

No doubt, such word method primers fail to give satisfying results. They have, in my opinion, become the Achille's heel of the Indian Literacy Programme.

There is another serious problem in selecting key words, related to the problems, the rural poor is facing today like "Rishwat" (bribery), "Neta" (Politician), "Garibi" (poverty), 'Deer' (delay) 'lack of drinking water,' 'manhgai' and so on. The danger is that if a discussion does start at all, it may turn anti-establishment. And the Programme is run by the very establishment. Few bureaucrats will tolerate such a primer. I understand that the circulation of PLI in Andhra Pradesh was stopped because of the 'lesson in it on the Arak policy of the Government. I wrote a primer in which this sentence occurred, "Some Government servants neglect their duty." The Chairman of the Committee, a very senior enlightened bureaucrat felt very unhappy and 'suggested' that this sentence be dropped!

### Lesson 1

## मकान

|   |                 |                |                 |
|---|-----------------|----------------|-----------------|
| म | म क ा न (House) |                |                 |
| क | कम (Less)       |                |                 |
| ा | काम<br>(Work)   | कमा<br>(Earn)  |                 |
| न | न ा म<br>(Name) | क ा न<br>(Ear) | न म क<br>(Salt) |

काका का मकान। The house of father's elder brother.

मन का मकान। House one likes.

काका का मान। The prestige of father's elder brother.

नमक            मकान            कनक            मकान

Salt            House            Wheat            House

नाना का मकान। The house of maternal father.

मामा का मकान। The house of uncle.

मकान का काम। Work of the house.

मन का काम। Work one likes.

*Note* : The words have no connection with the Key word. They are simply there to drill the letters.

Francis E.O. Omoruyi

## **Impact of the National Adult Literacy Programme on the Participants in Mid-Western Nigeria**

This study was designed to assess the impact of the National Literacy Programme on the participants in the Mid-Western part of the Country. The impact which literacy programmes have on the lives of the participants has continued to be a major concern to educators, literacy programme planners and administrators, Government and academics in the field of Adult Education. Empirical evidence available from other countries reveals that literacy programmes have profound effects on the participants in various ways. A total of 250 respondents were used for the study comprising of participants of literacy programme, instructors and administrators. The study reveals that the effect of literacy on the participants include increase in literacy skills, acquisition of communication skills, job efficiency, better understanding of one's society and greater involvement in societal activities like voting. Generally, the literacy programmes are considered to affect the lives of the participants in various ways both at the individual and family levels. It was suggested that frantic efforts should be made to link the literacy programme to specific economic activities in order to sustain interest of participants and motivate others to enlist in them as well as bring about improvement in their standard of living.

The problems of illiteracy has been a major concern to educationists, academicians, economic planners, development experts as well as the various government of the world. During the 1980s, there was a renewed onslaught against the problems of illiteracy. In 1990 this culminated in the International Literacy Year and the World Conference on 'Education For All,' held in Jomtien, Thailand, in March 1990, which was co-sponsored by the United Nations Development Programme (UNDP), UNESCO, UNICEF and the World Bank.

Over the last few decades, Nigeria has embarked upon the organisation of nation-wide literacy programmes. The rationale behind these programmes stem from the presumption that efforts to increase the literacy levels of the adults will have positive consequences for the participants or adult learners themselves, their community and eventually for the nation at large.

However, the empirical evidence available to support these expectations is embarrassingly low. Indeed, adult literacy in general is a neglected area in terms of data collection and research (UNESCO, 1991). In most cases, it is even difficult to find accurate information about the number of adults enrolled in literacy classes, the numerical strength of instructors or the number of adults who have been offered the literacy proficiency certificates.

Furthermore, the illiteracy rate, which is an essential indicator for effective

plan of action for raising the literacy level, is not certain in Nigeria. For example, UNESCO in 1987 reported that the illiteracy rate in the country was 20.9 million. In 1990, the illiteracy rate was put at 30.0 million. Since then the illiteracy rate has continued to rise. Consequent upon these variations, the illiteracy rate in Nigeria has to be considered with great caution. Nevertheless, the country is considered a major contributor to the world's seventy-two per cent population of adult illiterates (Osunde and Omoruyi, 1996).

In Nigeria, several studies have been conducted to examine the attrition rate and problems plaguing or hindering the efforts to eliminate illiteracy. (Uyi (1982), Efosa (1993), Omoruyi (1994), Osunde and Omoruyi (1996).

A major gap existing in our knowledge is the absence of studies of how adult basic literacy programmes work and the results they produce. The major questions that are left to be addressed include : What do adults really learn in literacy centres? To what extent do they become proficient in the 3Rs i.e. Reading, Writing and Computing? Do they really apply what they have learned in the daily life? What are the social and individual benefits of adult literacy?

These questions and many others have not yet received enough attention from the research community in the country. The resultant strain is a dearth in empirical data which would have helped policy makers, planners and administrators develop efficient strategies for maximizing and consolidating the benefits of literacy programmes.

The effects of literacy programme can be examined at three different levels. The first has to do with the degree to which the adult learners really learn what they are supposed to learn or master the content of the literacy programme which is the 3Rs and knowledge about health, family planning, population education, civic education, etc. The second level relates to the actual use the adult learners are making of the skills they have learned. Whilst, the third level is concerned with the real influence the literacy skills acquired has on the learners and their social environment i.e. the impact of literacy on the life of the beneficiaries.

A number of scholars have argued that literacy has an impact on the lives of graduates, particularly when the programmes are made responsive to the needs of the learners. (Ezeonah (1990); Freire (1990), Strect (1991), Knox (1993) and Maruatona (1995).

The effects of adult literacy in the lives of the participants are many and varied (Maruaton, 1993). For example, qualitative interviews in Nigeria have related the experiences of literacy (Okedara, 1981). At Ibadan it was discovered that functional literacy was crucial to the lives of the participants in that it was correlated with income generation and participation in economic activities. Okedara (1981), reports that this qualitative aspect of literacy which linked it to social effectiveness enable learners to express the impact of the programme by reporting its effects on their lives as they perceive it themselves.

The concern to determine the effects of the adult literacy programme on the lives of the participants is borne out of the desire to address the hazy

situation of accurate statistical data on literacy effects in the country and complement previous research efforts in the area.

### **Population**

The population of this study comprises literacy participants who are at the final stage of completion of their training programme, the literacy instructors and administrators in literacy centres in the Mid-Western zone of the country. The choice of the participants was based on their experience as learners. They are, therefore, better placed to report on the effects of the programme on their lives both as individuals and family members.

The literacy instructors and administrators were involved because of their role as teachers and administrators in the programme. Their own perception of the impact of the programme on the graduates was considered to be helpful in deciding the impact of the literacy programme.

### **Sample**

The sample for this study consisted of 250 respondents which included participants of literacy programme, instructors and administrators. While the learners or participants were randomly selected, no sampling was done for the literacy instructors and administrators because, relatively, their number was small. They were all consequently used for the study.

### **Collection of Data**

Data collection was done by the use of questionnaires. A total of 250 questionnaires were distributed to the respondents.

The questionnaires were constructed in such a way as to find out the level of agreement or disagreement with certain suggested objectives and effects of literacy programmes on the lives of the participants.

The questionnaires were administered physically by the researcher and they were checked against the various categories. A deliberate attempt was made to make the respondents as free as possible so that they can respond to the questions raised as frankly as possible. The questionnaires were later collected by the researcher.

The validity of the instrument was established by giving the draft to some experts in educational evaluation in the Faculty of Education, University of Benin, for scrutiny. The final design was based on the amendments and comments made on the draft specimen.

The reliability was established through a test-re-test procedure using an interval of two weeks. It was only after these steps that the actual collection of data was done.

### **Data Analysis**

In coding and analysing the data, the researcher made use of the mean, standard deviation and analysis of variance (ANOVA). A system of analysis

which would enable the researcher to determine the degree of acceptance to each statement raised in the questionnaire was employed. To this end, values were assigned to each category as follows : Strongly Agree (4), Agree (3), Disagree (2), Strongly Disagree (1). The cut-off point was determined by finding the mean of the values assigned to the options provided in the questionnaire.

**Table I**  
**Mean Responses of Graduates, Instructors and Administrators on the Impact of Literacy Programmes on Participants**

| <i>Serial No.</i> | <i>Suggested Impact of Literacy Programmes</i>   | <i>Participants' in Literacy Programme</i> | <i>Instructors of Literacy Programme</i> | <i>Administrators of Literacy Programme</i> | <i>Remarks</i> |
|-------------------|--|--|--|---|----------------|
| 1.                | Help the participants to understand their communities better.                            | 1.00                                       | 1.02                                     | 2.15  | Consensus      |
| 2.                | Provide participants with productive practical skills.                                   | 1.10                                       | 2.60                                     | 1.70  | Variation      |
| 3.                | Help participants to be able to read and follow instructions on drugs and other matters. | 2.10                                       | 3.06                                     | 2.15  | Consensus      |
| 4.                | Enable participants to become proficient in reading, writing texts.                      | 1.44                                       | 2.12                                     | 2.70  | Variation      |
| 5.                | Help the participants to increase their efficiency in the work place.                    | 3.61                                       | 3.31                                     | 2.60  | Consensus      |
| 6.                | It increases the survival skills of the participants (i.e. their communication skills).  | 3.10                                       | 2.10                                     | 3.06  | Consensus      |
| 7.                | Help participants to perform better their domestic activities.                           | 1.06                                       | 3.09                                     | 1.12  | Consensus      |
| 8.                | It help participants to be more involved in societal activities.                         | 2.80                                       | 3.10                                     | 3.05  | Consensus      |
| Total             |  | 16.21                                      | 20.4                                     | 18.53                                       |                |
| Mean of Mean      |  | 2.03                                       | 2.55                                     | 2.32  |                |

in determining the mean responses, the frequency of response under each response category was multiplied and divided by the sum of the values obtained under each response category with the number of respondents. Thereafter the views of the three groups were compared on the perceived impact of literacy on the participants.

**Findings**

The finding is as presented and analysed in the table above :

From the Table I, it could be seen that the participants, instructors and administrators considered items 1, 3, 5, 6, 7 and 8 as the main impact of literacy programme on the participants. However, the participants accepted items 5, 6 and 3 as the main impact of literacy programme on the participants. Whereas the instructors considered items 2, 3, 7 and 8 as the major impact of literacy programme, the administrators considered items 1 and 4 as the major impact of literacy on participants.

The Analysis of Variance (ANOVA) of the responses was computed as shown in Table II below.

**Table II**  
**Analysis of Variance (ANOVA) of the Mean Responses of Participants, Instructors and Administrators on the Impact of Literacy Programme.**

|                       | <i>Participants</i> | <i>Instructors</i> | <i>Administrators</i> |               |
|-----------------------|---------------------|--------------------|-----------------------|---------------|
| Total                 | 16.21               | 20.4               | 18.53                 |               |
| Mean (X)              | 2.03                | 2.55               | 2.32                  |               |
| Grand Mean (X) = 2.30 |                     |                    |                       |               |
| Source of Variation   | Sum of Squared      | Degree of Freedom  | Mean of Squared       | F. Cal. Value |
| Between Groups        | 1.81                | 2                  | 0.91                  | 0.14*         |
| Within Groups         | 135.9               | 21                 | 6.48                  |               |

\* Not Significant at P < 0.05

In Table II above, the calculated (F) value, as could be seen in 0.14, which is less than the F crit. i.e. the 'F' table value of 3.47 with degree of Freedom 2, 21 at P<0.05. Since the 'F' Cal. is less than 'F' Crit, the null hypothesis is accepted. It is, therefore, concluded that there is no significant difference in the perception of the participants, instructors and administrators of the impact of literacy programme on the products (i.e. participants).

**Discussion of Results/Findings**

The findings have shown that there is a general consensus between the views of participants, instructors and administrators on the impact of literacy programme on the products. The categories of respondents are agreed that

literacy programme, among other things, help the participants to understand better their communities, increase their ability to perform their jobs efficiently, enhance their communication skills, perform better their domestic activities, and become more involved in societal activities such as voting.

Most importantly, literacy enhances the communication skills of participants and their ability to read and understand the world. These appear to be the motivating force for people agreeing to take part in literacy training programmes. However, the desire to enhance one's standard of living would seem to be the most serious factors making people to enlist in any literacy programme. This underscores the various successes of literacy programmes, particularly those linked with income generating skills, as is widely reported (Okedara, 1981, Omolewa 1993 and Maruatona, 1995). Hence the current emphasis on functional literacy all over the world.

The various findings of this study collaborate with the findings made by Maruatona who reported that among those employed some one said that she could read notices left by her employers in the kitchen as a result of her participation in literacy programme. Some others also said that they can sign in and out of work as night watchmen as a result of the literacy skills they have acquired.

These results suggest that literacy programmes have a positive impact on the life of the graduates or participants.

Nevertheless, the categories of respondents are at variance about the view on whether or not literacy programmes have impact on participants' ability to read written text proficiently and provide them with productive practical skills. This probably explains the lack of popularity of the basic literacy programme whose main focus is on the three Rs only without any conscious efforts to provide participants with vocational skills or skills related to craft of any kind.

It can be concluded that literacy programmes have some benefits for individuals who participate in the programme.

The adult literacy programme in the region has had some impact on the lives of the participants as shown by the participants themselves, instructors and the administrators of such programme. The respondents recorded that it enabled them to acquire the literacy skills which they use in their day to day lives where they engage in various activities without having to rely on someone else to help them. They can now do their domestic activities better unlike when they were illiterates.

The study has also revealed that the programme has met the individual and family aspirations or needs of the illiterate persons. To this end, it has also been demonstrated that the programme had only concentrated on the social aspects and had not yet done anything to enable the graduates or participants to engage in economic activities that would improve their standard of living and status.

Frantic efforts should, therefore, be made to involve the participants of the programme in some economic activities that would improve their living pattern

or lives. Linking literacy to certain identified skills or crafts would help to sustain the interest of those in the programmes as well as attract others to enlist in the programme. This is the surest way to encourage and motivate the participants for the programme.

### References

- Bhola, H.S. (1979) : *Evaluating Functional Literacy*, Amersham : Hulton Educational Publications Ltd.
- Freire, P., and Shor, I. (1987) : *Pedagogy For Liberation; Dialogues for Transforming Education*, Grenby : Bergin and Garvey.
- Knox, A.B. (1993) : *Strengthening Adult and Continuing Education : A Global Perspective on Synergistic Leadership*, San Francisco : Jossey-Bass.
- Lind, A. Johnson (1986) : *Adult Literacy in the Third World. A Review of Objective and Strategies*, Stockholm : SIDA Education Division Documents No. 32.
- Maruatona, T. (1995) : *Effects of the National Literacy Programmes on the Graduates in the South East District of Botswana*, *Journal of AALAE*, Vol. 9, No. 2.
- Okedara, T.J. (1981) : *The Impact of Literacy Education in Ibadan, Nigeria*, Ibadan: University of Ibadan Press.
- Omoding-Okwalinga, J. (1993) : *Withdrawal From Literacy Classes : A Study of Adult Male Sample from Botswana, Kenya and Malawi*; *Mosenodi*, Vol. I, No. 2, pp. 49-59.
- Omolewa, M. et al (1990) : *The Open Door : Teaching Them To Teach Their Peers. Proceedings of the IFESH Training Workshop for Literacy Teachers and the New-Literates*, Araromi Ja in Ido Local Government Area, Oyo State, Nigeria.
- Omoyemi-Jayeola, M.S. (1996) : *Promoting Adult Literacy Education Through Socio-economic and Cultural Groups in Ondo Local Government Area of Ondo State : A Report of an experience. A Paper Presented at the National Research Conference on Adult and Community Development Education held at the University of Benin, Benin City, Nigeria, 10th-12th July, 1996.*
- Osunde, A.U., and Omoruyi, F.E.O. (1996) : *An Assessment of The Implementation of Literacy Programmes Curriculum in Benin Metropolis : Implications for Management. A Paper Presented at the Second Annual National Research Conference on Adult and Community Education in Nigeria Organised by the Department of Adult Education, University of Benin, between 10-12 July.*
- Wagner, D.A. (1990) : *Literacy Assessment in the Third World : An Overview and a Proposed Schema for Summary Use*, *Comparative Education*, Vol. 34, No. 1, Pp. 112-137.

**Uma Joshi  
Neepa Mehta  
Hinaxi Zaveri**

## **Games as Reinforcers of Literacy Skills**

Literacy is considered as a change agent and is vital for people to go ahead and progress. However, learning as a process may make the learners to forget, especially in the case of neo-literates, who may relapse into illiteracy. Therefore, as a follow up of literacy, the need for the post-literacy campaign arises.

The Total Literacy Campaign was launched in the Baroda City of Gujarat State in 1994. The second phase of the campaign was launched in 1995, five months after the completion of the first phase of the campaign. Along with this time gap, it was also noticed that the methods used in the literacy classes were formal, providing the participants to remain passive rather than learning through interactive methods.

This article is about the development and use of games as interactive methods of reinforcing literacy skills. It throws light on an action project undertaken by the Department of Home Science Education and Extension at the Faculty of Home Science, M.S. University, Baroda. Suggestions are also provided about interventions that can be planned and role that can be played by university staff and students in promoting literacy through interactive communicative methods.

Human resource development is accepted as an essential component of all developmental activities. For this purpose, education becomes the capital input. It is a powerful tool for social, economic and political change, national integration, economic growth and population control. However, development cannot be imposed or thrust upon people who are not prepared to accept change. Literacy, considered as a change agent, is vital for people to go ahead and progress. We know that the national government is trying to bring the socially disadvantaged and down-graded sections of society in the mainstream of life through efforts like the National Literacy Mission. Under these programmes, the achievement of self-reliance in literacy and numeracy is one of the major steps to promote education among illiterates.

### **Conceptualising the Project**

The course content and practical exposure of a student in the Department of Home Science Extension and Communication are mainly community oriented. Literacy is basic to increase communication linkages with people, especially adult women in the community. However, it was observed that the methods used to promote literacy were teacher-oriented and not involving the

active participation of the learners. It is necessary to realise that the adult learners attend the literacy classes soon after returning from their daily work when they feel tired and lack the necessary motivation to learn. So the methods used to teach them should attract their attention in learning and help in clarifying concepts, increase their understanding and arouse interest. The adult women attending literacy classes may have limited span of concentration as they have many priorities at home. The use of interactive methods of teaching may help to gear their interest and attention towards the learning situation. Again, the new methods of teaching and learning need to be used in enhancing literacy skills so as to :

- (i) make learning pleasurable
- (ii) clarify concepts
- (iii) increase understanding and
- (iv) aid in retention and reinforcement.

Hence this project was conceptualised to develop and use games as reinforcers of literacy skills of women. This project was carried out under the strategies formed as art of the post-literacy campaign of reinforcement and sharpening of skills in reading, writing and numeracy of the neo-, semi-, and left out literates.

### **Importance of Games as Method of Teaching and Learning**

A game is recognised as a regularised play activity. As educational methods, games have many advantages like, they :

- (1) have attention focusing quality,
- (2) enable the learners to see the consequences of their action while winning or losing point or score,
- (3) provide a self-motivating environment,
- (4) motivate and sustain retention due to active participation and learning, and
- (5) increase perception.

Games, thus, help to meet the varied interests of large group of learners differing in age, interest and level of physical maturity. Games involve active participation on part of learners and hence they learn discovering new things from the commonly known concepts of games. Therefore, their educational value is high. Games can be used for learning new terminologies, modifying undesirable work habits and apply learning imaginatively to new ideas. Games are self-evaluative devices helping the individual to check one's own progress and failure. Games facilitate recreation and entertainment.

They enable the learners with low ability, to learn with ease and fun. Hence games can be used to promote and reinforce literacy concepts under the post-literacy campaign.

As far as literacy is concerned women are particularly an under privileged

group who form a voiceless body of people. Their role in the nation's economy is ignored and their personal development neglected. Women constitute the largest number of illiterates in India and all over the world. They are the least paid and most exploited. Again, women who missed primary education may find it difficult to attend adult literacy classes because of their family commitments. Thus, they are denied of every opportunity towards educating themselves. However, it is known that women are the key persons in the family in educating the next generation. When the woman is illiterate, she will not be able to educate her children and manage the family income. If the woman is literate and continues to learn, she will not be cheated; she will be able to think and act for her own betterment. So, this project was planned to be taken up with women who had participated in the first phase of the literacy campaign.

### **Objectives of Project**

- (1) To develop and use games for reinforcing the selected concepts of literacy and numeracy included in literacy and post-literacy primers (text) among adult women under Post-Literacy Campaign.
- (2) To find effectiveness of the games in reinforcing the concept of literacy and numeracy.

The report on the total literacy campaign of Baroda, as well as a dialogue with campaign volunteers revealed that games were not utilized for teaching during the first phase of the campaign. The process of developing games was carried out in three phases :

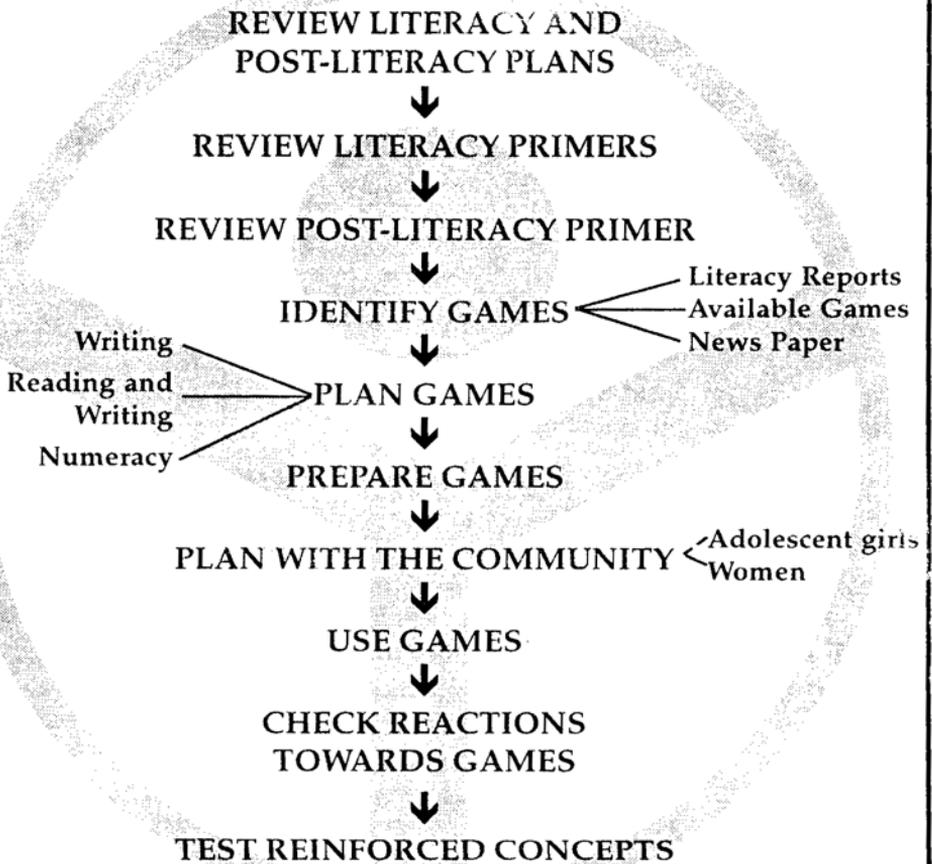
- (i) Identifying different ideas for educational games
- (ii) Preparation of games
- (iii) Preparation of tools.

The different ideas like words, phrases and mathematical concepts for educational games were collected by identifying available games and reviewing available materials on literacy and post-literacy. A total of ten games were finalised to include selected concepts of literacy and post-literacy which helped in reinforcing reading, writing and numeracy skills. The details of the games, the content covered and the skills reinforced are as given in Table 1.

The following steps were worked out after the content for the games were selected:

- (i) finalising the objectives, rules and directions for playing each game,
- (ii) deciding the materials on which each game was to be developed,
- (iii) deciding the letters, blocks, and colour differentiations and the size of the actual games,
- (iv) preparing a layout for each game and
- (v) preparing final games using chart papers, cardboard and wood.

## PLAN OF THE PROJECT



**Table 1**  
**Description of Games, Content Covered and Skills Reinforced Through Each Game**

| <i>Sr. Name of the Game</i> | <i>Content Covered</i>                                      | <i>Skills reinforced</i> |
|-----------------------------|---|--------------------------|
| 1. Card Matching            | Name of the flowers   | Reading and Writing      |
| 2. Cross-word Puzzles       | Names of people from the literacy primers                   | Reading and Writing      |
| 3. Akshar Pustak            | Words from literacy primers                                 | Reading and Writing      |
| 4. Sentence making          | Phrases from literacy primers                               | Reading and Writing      |
| 5. Map Arrangement          | Map of India with Capitals                                  | Reading and Writing      |
| 6. Clock Wheel              | Numbers from 50 to 1,00,00,000                              | Numeracy and Writing     |
| 7. Mathematical Puzzle      | Simple to complex additions                                 | Numeracy and Writing     |
| 8. Matching Tables          | Table 1 to 10   | Numeracy and Writing     |
| 9. Measurement Games        | Area measurement of square, rectangle, triangle and circle. | Numeracy and Writing     |
| 10. Fraction Game           | Measuring fractions of rectangle, triangle, and circle.     | Numeracy and Writing     |

### Execution of the Project

The various phases in this stage were :

- (i) identification of beneficiaries,
- (ii) using games for reinforcement.

The beneficiaries were identified by

1. Collecting information regarding the different wards covered under the Literacy Campaign,
2. Selection of two communities in the Municipal Corporation ward for carrying out the project.

A total of fifty neo-literates attended the classes conducted by the project worker.

The day-wise plan of work during the project consisted of

- (1) Motivational activities and

(2) Playing games

The project worker had planned a variety of motivational activities on various topics to ensure attendance in the project. Filmstrips, slides and video shows were used for arousing the interest of women participants. Topics like healthy and unhealthy living conditions, supplementary income generating activities etc. were covered along with the topics of national importance like importance of literacy, immunization schedule for a child etc. (refer to Table 2)

A total of three exposures were planned for each game. The daily plan, therefore, included first exposure to all the ten games within first four days. The same plan was carried forward for the next eight days so as to double the number of exposures to the games. All the literacy skills, that is reading, writing and numeracy were reinforced through games for all the days. The entire project was therefore executed as shown in Table 2.

**Table 2**  
**Daywise Plan for Execution of the Project**

| <i>Sr. No.</i> | <i>Motivational Activities</i>  | <i>Games</i>  |
|----------------|---|---|
| DAY 1          | * 1. Healthy and unhealthy living conditions<br>* 2. Immunisation schedule for your child |   |
| DAY 2          | Exhibition of games.<br>* 3. Importance of literacy                                       |   |
| DAY 3          | Reading newspaper<br>*1. Supplementary income generating activities                       | Clock Wheel<br>Card Matching<br>Mathematical Puzzle       |
| DAY 4          | Reading Newspaper<br>* 1. Care of eyes  | Measurement game<br>Cross-word puzzles<br>Sentence making |
| DAY 5          | Reading newspaper<br>* 2. Why small family  | Map arrangement<br>Matching tables                        |
| DAY 6          | Reading newspaper<br>* 1. Deficiency diseases   | Fraction game<br>Akshar Pustak                            |
| DAYS 7 to 10   | Reading newspaper<br>* 1. Moral Education<br>* 1. Care during pregnancy                   | Repeat game plan of day 3 to 6                            |
| DAYS 11 to 14  | Reading newspaper   | Repeat game plan of day 3 to 6                            |
| DAY 15         | Reading newspaper   | Revision exercise.  |
| DAY 16         |   | Display of Games Administration of reaction scale         |
| DAY 17         |   | Evaluation  |
| * 1. Slides    | * 2. Filmstrips   | * 3. Video films  |

The daily plan of work during the project was approximately distributed in the following manner :

| <i>Activity</i>                              | <i>Time<br/>(Minutes)</i> |
|--|---------------------------|
| Casual talking                               | 5                         |
| Reading newspaper headlines                  | 5                         |
| Motivational activities                      | 20                        |
| Discussion and guidance<br>for playing games | 5                         |
| Games for reading and writing<br>skills      | 30                        |
| Games for writing skills                     | 20                        |
| Games for numeracy skills                    | 25                        |
| Attendance and instructions for<br>next etc. | 10                        |
| <b>Total</b>                                 | <b>120 (2 hours)</b>      |

### **Evaluation and Results**

A reaction scale and a test paper were also developed to find the effectiveness of the games. The reaction scale had questions regarding the writing of letters and numbers, whether they liked playing the games, whether the games helped them in learning, overall appearance of the games and usefulness in reinforcing literacy skills. The test paper with a total of sixty marks was developed to include the writing, reading and writing and numeracy sections.

The games and test paper were validated by experts in the areas of adult and nonformal education, extension education, community work, and methods, and materials of teaching.

After fifteen days of exposure of the games, an exhibition of all the ten games was planned on the day of administering the reaction scale. The time taken for filing the reaction was thirty minutes. The achievements of neo-literates were evaluated through the test paper developed by the project worker. It was answered in approximately one and a half hour. The results of the project were as follows :

### **Reactions of learners towards the games used to reinforce the literacy skills**

All the neo-literate learners reported that :

- (1) They liked to learn with the games as it was an interesting method of learning.
- (2) The pictures, words and numbers used in the games were clear and readable.
- (3) Learning became easy with the words and numbers written in the games.

- (4) The games helped them most to reinforce their skills in writing, specially the games of Map Arrangement and Akshar Pustak.
- (5) The games of Card Matching and Akshar Pustak helped them in reinforcing their skills in reading.
- (6) The games of Clock Wheel and Puzzles of mathematical operations like addition helped in reinforcing skills in numeracy.

### **Result of the Test**

- (1) Overall majority (66 per cent) of the neo-literates had obtained high scores in the range of 45 to 59 marks on the subject matter test.
- (2) Majority (70 per cent) of neo-literates had obtained high scores in questions pertaining to writing skills.
- (3) High majority (90 per cent) of the neo-literates had obtained high scores in the questions pertaining to reading and writing skills.
- (4) Little more than three fourth (76 per cent) of neo-literates had achieved high scores in the items on numeracy skills.

The games developed by educational institutions can be rescued in the following ways :

- (1) From the results of the test it is known that games were effective in reinforcing the skills in reading, writing, and numeracy. The reactions of the learners, the enthusiasm of the community worker and the members of social service organizations supporting the programme in one of the communities towards the use of games was favourable. These results and observations signify the need for developing and using new materials to hold the attention, develop interest and motivate the learners in this campaign.
- (2) A major complaint during, and at the end of, the Literacy Campaign has been the high dropout rate of learners. This could be stopped by planning and using a variety of motivational activities selected with the dual purpose of providing recreation and information.
- (3) The community worker had shown interest in learning the use of games for promoting the various concepts under the Total Literacy Campaign. The regular interaction with her has helped to know that high dropout rate of volunteers is mainly due to lack of interesting resources for teaching. This can be prevented by developing and training them in the use of new methods and materials for teaching under the Post-Literacy campaign.
- (4) At the project implementation stage, the project worker had experienced that the girls and women had the problem of lack of practice in developing and continuing to develop writing skills. Thus, some of the games had to be compulsorily converted to writing exercises. This points towards the need for stressing the importance of developing readiness and providing opportunity for continuity of

writing skills even after the completion of the Total Literacy Campaign.

- (5) During the stages of identification of beneficiaries and implementation of project, the project worker had benefited from the control that the campaign volunteers or workers had over the girls and women in the community. Hence if academic institutions are to contribute towards the literacy campaigns, then provision should be made by concerned authorities to depute volunteers to help the students to establish rapport and successfully implement the planned project with the women in the community.

### **Suggestions for Contributions of University Staff and Post-Graduate Students to the Post-Literacy Programme**

(1) *Media Consultants* in providing suggestions for developing methods and materials :

- (a) on literacy skills of reading, writing and numeracy (games, charts, audio/video tapes)
- (b) for developing daily living concepts like income generating activities, health and hygiene, basic laws, energy conservation. (Video/audio tapes, charts, posters, slides)

(2) *Trainers* of teacher-volunteers and community workers in the use of new teaching methods and materials in Post-Literacy Campaign.

(3) *Writers or Producers* of pictorial booklets, leaflets, pamphlets for helping neo-literates continue to develop and use their reading skills.

(4) *Establishing Rapport* with the voluntary and social service organizations contributing towards implementation of the Total Literacy Campaign. This will help students to take up and plan projects in the Total Literacy Campaign and try new methods and materials under it.

(5) *Conducting Research On :*

- (a) effectiveness of different methods used in Total Literacy Campaign.
- (b) problems of people in the community affecting success of Total Literacy Campaign.
- (c) resources available and lacking in successful implementation of Total Literacy Campaign.

### **References**

- Vadodara District Literacy Committee. A Survey Report on Baroda. Printed by Vadodara District Panchayat Pr., 1993, 35 p.
- \_\_\_\_\_, A Strategy Report of PLC 1994-95 in Baroda. Printed by Vadodara District Panchayat Pr., 1995, 6 p.
- Baroda City Literacy Committee. A Guide Book for Baroda City Post-Literacy Campaign. Printed by Baroda Municipal Corporation, 1995, 14 p.
- Chandra, A.; Shah, A. and Joshi, U. Fundamental of Teaching Home Science. New Delhi, Sterling Publishers (P) Ltd., 1989, pp. 82-83.

- Daswani, C.J. Role of Universities in Rural Literacy Campaign. *Indian Journal of Adult Education*, 46 (1) January, 1985, pp. 24-27.
- India, Directorate of Adult Education, *Crusade against Illiteracy (Vol. II)*. New Delhi, Printed by the Government of India Pr., 1987.
- Paralikar, K. *Games as a Method of Teaching and Learning*, Baroda, Faculty of Home Science, pp. 1-7. Mimeographed.
- Srivastava, R.M. Literacy as a Communication Skill. *Indian Journal of Adult Education*, 40 (3) March, 1990, pp. 1-14.
- Varma, C. *The Role of Games in Development of Child*. A Paper Presented at Agro-Asian Conference. New Delhi, 1983.
- Zaveri, H. *An Action Project to Reinforce Literacy Skills Under Post-Literacy Campaign of Nagar Prathamik Shikshan Samiti*. Baroda City, Through the Use of Games, 1995-96, Unpublished M.Sc. dissertation, Baroda. Department of Home Science Education and Extension, Faculty of Home Science, M.S. University, Baroda. 1996.

A.B. Ogunwale  
E.A. Laogun

## **Extension Methods Used for the Dissemination of Improved Farm Practices by Village Extension Agents**

### **A Case Study of Oyo-State Agricultural Development Programme**

This study was conducted with a view to identify various extension methods being used, and to determine their frequency of use in Nigerian Agricultural Development Programme (ADP). Three stage simple random sampling technique was used for the selection of 150 village extension agents (VEAs) for data collection. The use of tables showing frequencies and percentages, and analysis of variance (ANOVA) were employed for data analysis. The study shows that the four extension methods used were: visit to farms and homes; face-to-face personal contact; small plot adoption trials and addressing farmers in groups. It was statistically established that there was significant difference in the frequency of use of the extension methods. The use of combination of extension methods that are appropriately selected for target audience was recommended for the programme.

It is commonly felt that our extension programme has not achieved the desired success in increasing the agricultural production since independence. Although, research centres in the country have demonstrated that it is possible to grow high yielding crops by using improved varieties, fertilizers, agro-chemicals, and high plant population, but most farmers have been unwilling or unable to adopt the resulting technologies. One of the reasons for low efficiency of our extension service is due to the improper selection and use of different extension methods for extending improved agricultural practices.

Clark and Akinbode (1968) identified both mass media and interpersonal sources of information as means of communication with the rural populace. Lionberger (1960) reported that television can be effectively used in conjunction with group meetings. Jain (1963) and Hussain (1964) concluded that among the extension methods used by block extension personnel, demonstration is the most effective method for dissemination and adoption of improved agricultural practices. While Kidd (1971) established that mass media sources constituted about 15 per cent of the channels used to reach farmers by extension service in Nigeria.

Extension constitutes the disseminating or transfer agency, and the farmers constitute the utilization system (Akinbode, 1983). Thus, the job of extension personnel in this context is very complex and crucial. But our knowledge of extension methods being used for disseminating improved farm practices is

quite inadequate. In the light of this fact, this study was designed to examine the extension methods being used for disseminating improved farm practices by village extension agents in Nigerian Agricultural Development Programmes.

This study was conducted in the Oyo-State Agricultural Development Programme—now splitted into Oyo and Osun Agricultural Development Programmes, with Headquarters at Shaki and Iwo respectively. The six zones i.e. Ibadan, Iwo, Osogbo, Ogbomoso, Oyo and Tede were used for data collection purposes.

Since the extension methods already being used by the extension agents in the field were to be studied, an investigative research design was employed. The extension methods were studied in relation to their frequency of use for improved farm practices. Data for the study was collected from village extension agents (VEAs) working in the programme. The Fortnighthy Training Meetings (FNTs) organised by the training centres offer extension agents, in the six zones were used for administering questionnaires, which they took home and returned during the following fortnight training meeting. The questionnaires were pre-tested and revised accordingly for actual data collection.

Three-stage simple random sampling technique was used for the selection of extension agents. At the first stage, 4 areas were selected from each zone at random and from the selected areas, 2 blocks were selected randomly. Then, 5

**Table 1**  
**Frequency and Percentage Distribution of Avenues for Dissemination of Agricultural Technologies Used by Extension Agents in the Programme**  
**N=150.**

| <i>Avenues for Dissemination</i>         | <i>Frequency</i> | <i>Per cent</i> |
|--|------------------|-----------------|
| 1. Radio and Television                  | 0                | 0.00            |
| 2. The Programme Research Officers       | 7                | 4.67            |
| 3. The Programme Registered Farmers      | 47               | 31.33           |
| 4. Leaflets and Folders                  | 28               | 18.67           |
| 5. Magazine and Newspapers               | 0                | 0.00            |
| 6. Special Short Training Programme      | 11               | 7.00            |
| 7. Farmers Fortnighthy Training Meetings | 143              | 95.33           |
| 8. Monthly Technology Review Meeting     | 3                | 2.00            |
| 9. Blackboard News                       | 37               | 24.67           |
| 10. Fellow Village Level-workers         | 23               | 15.33           |
| 11. Programme Contact Farmers            | 131              | 87.33           |
| 12. Small Plot Adoption Trials           | 145              | 96.67           |
| 13. Extension Drama/Playlet              | 42               | 28.00           |
| 14. On-farm Adaptive Research            | 49               | 32.67           |
| 15. Subject Matter Specialists           | 5                | 3.33            |

Source : Field Research Survey, 1991.

cells were randomly selected to get village extension agents at cell-levels. In all, 150 extension agents constituted the sample size for the study.

The use of tables showing frequencies and percentages was employed in analysis. A set of scores which represent the frequency of use of various extension methods were subjected to Analysis of Variance (ANOVA) Statistical test criteria. It was hypothesised that there was no significant difference between the frequency of use of various extension methods employed by extension agents.

The extension workers indicated all the avenues they used for disseminating farm information and technologies to farmers in the programme. The avenues mentioned were presented in Table 1.

The findings revealed that small plot adoption trials (96.67 per cent); farmers fortnightly training meetings (95.33 per cent); and Programme Contact Farmers (87.33 per cent) constituted the three avenues mostly used for disseminating farm information and improved technologies by extension agents. On-farm adaptive research sites (32.67 per cent) : the programme registered farmers (31-33 per cent); extension drama/playlet (28.00 per cent) blackboard news (24.67 per cent); leaflets and folders (18.67 per cent) and fellow-village level workers (15.33 per cent) were also being used.

Other avenues that were also being used for disseminating farm information and technologies to farmers included special short training programme (7.00 per cent); the programme research workers (4.67 per cent); subject matter specialists (3.33 per cent); and Monthly Technology Review Meetings (2.00 per cent). However, no extension worker indicated the use of the following media: radio, television, magazine and newspapers as means of disseminating agricultural information and technologies in the programme.

The extension workers were further asked to indicate various communication channels with farmers in the programme. Their responses were collated and tabulated in Table 2. It is apparent that small plot adoption trials (98.00 per cent) : visits to farms and homes (97.33 per cent); farmers training meetings (90.67 per cent); group meetings of farmers (86.00 per cent); and face-to-face personal contacts (82.00 per cent) were the most frequently used channels of communication with programme farmers.

Field trips and visits (52.00 per cent), came next, followed by farmers' field days and exhibition (26.00 per cent); blackboard news (24.00 per cent); publications such as posters, bulletins and pamphlets (19.33 per cent); extension drama/playlet (18.00 per cent); radio broadcast (12.00 per cent) and television broadcast (8.67 per cent) came last in descending order of use. These findings were in accordance with the findings of Kidd (1971) and Williams and Williams (1972). The findings also revealed that there was little use of the following media; blackboard news, publications, extension drama and playlet, radio and television, while there was no use of agricultural film shows and mobile open broadcasts in the programme.

**Table 2**  
**Frequency and Percentage Distribution of Different Communication Channels With Farmers Used by Extension Agents in the Programme. N = 150.**

| <i>Communication Channels</i>                          | <i>Frequency</i> | <i>Per cent</i> |
|--|------------------|-----------------|
| 1. Visit to Farms and Homes                            | 146              | 97.33           |
| 2. Face-to-face Personal Contact                       | 123              | 82.00           |
| 3. Group Meetings of Farmers                           | 129              | 86.00           |
| 4. Small Plot Adoption Trials                          | 147              | 98.00           |
| 5. Farmers Training Meetings                           | 136              | 90.67           |
| 6. Extension Drama/Playlet                             | 27               | 18.00           |
| 7. Farmers Field Days and Exhibition                   | 39               | 26.00           |
| 8. Field Trips and Field Visits                        | 78               | 52.00           |
| 9. Agricultural Film Shows                             | 0                | 0.00            |
| 10. Publications e.g. Posters, Bulletins and Pamphlets | 29               | 19.33           |
| 11. Mobile Open Broadcast                              | 0                | 0.00            |
| 12. Radio Broadcast                                    | 18               | 12.00           |
| 13. Television Broadcast                               | 13               | 8.67            |
| 14. Blackboard News                                    | 36               | 24.00           |

*Source* : Field Research Survey, 1991.

The extension agents were asked to mention their points of contact with farmers. It was revealed that the field extension staff had established contacts with farmers at village level. Fortnightly schedule meeting (98.00 per cent) Demonstration plots (87.33 per cent); Farmers' villages (83.33 per cent); Farmer farm sites (76.67 per cent) and contact farmers' farms (71.33 per cent) were the five mostly used points of contact with programme farmers. Few extension agents indicated the use of On-farm shed (14.00 per cent) and meeting of co-operative organisations (11.33 per cent) as their points of contact with farmers. This implies that the extension agents worked through visits to farmers' fields and homes in the programme.

#### **Sources of Farm Information to Farmers**

The extension agents were specifically asked to indicate various sources of farm information available to programme farmers. Their responses were collated and tabulated in Table 3. It is evident from the Table that the four recognised available sources of farm information to farmers are extension agent's visitation (88.67 per cent); programme contact farmers (85.33 per cent); small plot adoption trial sites (83.33 per cent); and farmers' training meetings (65.33 per cent).

**Table 3**  
**Frequency and Percentage Distribution of Sources of Farm Information Available to Programme Farmers as Indicated by Extension Agents. N = 150**

| <i>Sources of Farm Information</i>          | <i>Frequency</i> | <i>Per cent</i> |
|---|------------------|-----------------|
| 1. Extension Agents Visitations             | 133              | 88.67           |
| 2. Farmers' Training Meetings               | 98               | 65.33           |
| 3. Area Offices                             | 27               | 18.00           |
| 4. Programme Contact Farmers                | 128              | 85.33           |
| 5. Radio Broadcast                          | 21               | 14.00           |
| 6. Mobile Open Broadcast                    | 0                | 0.00            |
| 7. Agro-Chemical and Farm Input Centres     | 49               | 32.67           |
| 8. Farmers Field Days/Field Trips           | 63               | 42.00           |
| 9. Small Plot Adoption Trials (SPATs) Sites | 125              | 83.33           |
| 10. Blackboard Information                  | 37               | 24.67           |
| 11. Extension Drama and Playlet             | 29               | 19.33           |

*Source* : Field Research Survey, 1991.

Other sources of information indicated by extension agents were farmers' field days and field trips (42.00 per cent); agro-chemical and farm input centres (32.67 per cent); blackboard information (24.67 per cent); extension drama and playlet (19.33 per cent) and radio and television broadcast (14.00 per cent) in decreasing order. No extension agent indicated mobile open broadcast and agricultural film show as available sources of information to farmers in the programme.

#### **Frequency of Use of Extension Methods**

The frequency of use of various extension methods was investigated. The responses of village extension agents were collated and tabulated in Table 4. It is apparent that visits to farms and homes (60.00 per cent) was the most frequently used method. This was followed by face-to-face personal contact (55.33 per cent); small plot adoption trials for methods and result demonstrations (32.00 per cent), and addressing farmers in groups (32.00 per cent). Then, extension drama and playlet, tours and field-trips and farmers' field days and exhibition came next, while agricultural film shows and publications came last in descending order of frequency of use.

The responses on frequency of contact with farmers revealed that 150 extension agents (100 per cent) used to visit farmers fortnightly, 8 extension agents (5.33 per cent) used to visit farmers as required, while those who reported paying extra visits to them accounted for only 9.5 per cent. This implies that there were regular scheduled visits to farmers by extension staff to advise and teach farmers improved agricultural practices.

**Table 4**  
**Distribution of Frequency of Extension Methods Employed by Village Extension Agents. N = 150.**

| <i>Extension Method</i>  | <i>Most Frequent Actual No. of VEs</i> | <i>Frequent Actual No. of VEs</i> | <i>Less Frequent Actual No. of VEs</i> |
|--|--|-----------------------------------|--|
| 1. Visit to Farm and Homes                                     | 90                                     | 48                                | 4                                      |
| 2. Face-to-face Personal Contact                               | 83                                     | 65                                | 0                                      |
| 3. Small Plot Adoption Trial (Method and Result Demonstration) | 48                                     | 83                                | 12                                     |
| 4. Addressing Farmers in Groups                                | 48                                     | 54                                | 19                                     |
| 5. Extension Drama/Playlet                                     | 29                                     | 83                                | 33                                     |
| 6. Agricultural Film Show                                      | 12                                     | 23                                | 107                                    |
| 7. Tour and Field Trips  | 25                                     | 50                                | 69                                     |
| 8. Publications  | 4                                      | 44                                | 83                                     |
| 9. Farmers' Field Days and Exhibitions                         | 19                                     | 62                                | 54                                     |

Source : Field Research Survey, 1991.

**Analysis of Variance for Frequency Scores**

The frequency scores of nine extension methods mentioned by extension agents were subjected to analysis of variance (ANOVA) in order to test the null hypothesis that no significant differences exist between their means. The summary of analysis of variance is presented in Table 5. With  $F_{cal} = 0.852$  and  $F_{tab}$  at 0.05 = 3.4, we can reject the null hypothesis. Thus, the alternative hypothesis that significant differences exist among the frequency scores of the extension methods was accepted.

**Table 5**  
**Summary of Analysis of Variance for Frequency of Use of Extension Methods.**

| <i>Source of Data</i> | <i>Sum of Variance</i> |               |                 |                        |                        |                 |
|-----------------------|------------------------|---------------|-----------------|------------------------|------------------------|-----------------|
|                       | <i>d.f</i>             | <i>Square</i> | <i>Estimate</i> | <i>F<sub>cal</sub></i> | <i>F<sub>tab</sub></i> | <i>Decision</i> |
| Between group         | 2                      | 1533.74       | 766.87          | 0.852                  | 3.40                   | Reject          |
| Within group          | 24                     | 21590.44      | 899.60          |                        |                        | Ho              |
| Total                 | 26                     | 23124.18      |                 |                        |                        |                 |

Source : Field Research Survey, 1991.

The study was conducted to identify various extension methods being used for disseminating improved farm practices in agricultural development programme. The findings revealed that the most frequently used extension methods by extension agents were : small plot adoption trials, visits to farms and homes; farmers training meetings; group meetings of farmers; and face-to-face personal contacts. Other methods used include field trips and visits, followed by farmers' field days and exhibitions. Also, there was little use of the following media; radio, television, blackboard news, publications such as posters and pamphlets, and extension drama and playlets.

However, the following media—magazines, newspapers, agricultural film shows and mobile open broadcasts were not being used for the dissemination of improved practices. Thus, small plot adoption trials, personal contacts, farmers' meetings and group discussions at demonstrations were the main avenues for disseminating improved farm practices in the programme. Also, there was significant difference in the frequency of use of various extension methods employed by the extension agents in the programme.

The study revealed that the use of mass media such as agricultural film show, mobile open broadcast, radio and television has not yet been institutionalized as sources of farm information in the programme. Studies in some areas have shown that mass media can be relied upon as a quick and efficient means of notifying farmers of new developments in agriculture. Thus, information may be delayed with the absence of mass media in the programme.

Also, the emphasis on personal contacts, though professionally, good, may limit the extent of coverage, if not supported with other extension methods. Farmers may be dissatisfied with extension agents if they do not see enough of them. The provision of adequate transport facilities is very imperative to maintain constant visits of extension agents to farmers. Thus, the use of combination of extension methods that are appropriately selected for target audience is recommended.

### References

- Akinbode, I.A. (1983) "A Study of the Agricultural Technology Delivery Systems in the Northern States of Nigeria." (Unpublished Research Paper, pp. 5-17).
- Clark, C.R. and Akinbode, I.A. (1968) "Factors Associated with Adoption of the Farm Practices in Western State, Nigeria." *Research Bulletin No 1*. Faculty of Agriculture. University of Ife, Ile-Ife, Nigeria.
- Hussain, S. (1964) "A Critical Analysis of Demonstrations as Communication Media in Adoption of Improved Technology of Farming in Community Development Block. Azitmal district, Etawah, (Unpublished M.Sc. (Ag) thesis submitted to Agra University).
- Jain, N.C. (1963) "A Study of Relative Effectiveness of Extension Methods in Adoption of Improved Agricultural Practices in Development Block, Amaraudha District, Kanpur. (Unpublished M.Sc. (Ag) thesis submitted to Agra University).

- Kidd, David (1971) "Participation or Contact with Various Schemes of Ministry of Agriculture and Natural Resources" Ibadan (An Unpublished M.Sc (Ag) thesis).
- Lionberger, H.F. (1960); *Adoption of New Ideas and Practices*. "A Summary of the Research Dealing with the Acceptance of Technological Change on Agriculture. Ames Iowa, Iowa State University Press.
- Williams, S.K.T. and Williams, C.E. (1972). The Relationship of Farmers Characteristics to the Sources of Information on Improved Farm Practices in Western Nigeria. *Bulletin of Rural Sociology*, Vol. 6(2).

## **Adult Education News**

### **Central Zone Conference on Adult Education : A Report**

The Central Zone Conference on Adult Education which concluded in Srinagar (Garhwal), U.P. on June 13, 1998 noted with concern that budget allocation for adult education has been reduced for the year 1998-99. This, it felt, would not only effect education among adults but would effect primary education too as education of parents was essential for universalisation of Primary Education.

The Conference urged the Government to study in depth all the adult education programmes launched in the country since independence and the future programmes of adult education should be based on appraisal of earlier programmes.

The two-day Conference was convened by the Indian Adult Education Association in collaboration with Department of Adult, Continuing Education and Extension, HNB Garhwal University. It was attended by about 75 delegates from the States of Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh and Delhi. They represented the Government Departments, Universities, Zilla Saksharta Samitis and Voluntary Organisations.

The Conference was inaugurated on June 12, 1998 by noted environmentalist Shri Sunderlal Bahuguna. In his address, Shri Bahuguna stressed that adult education should not be restricted to imparting adult literacy only. The adult education programme should be undertaken in wider perspective.

Shri Bahuguna emphasised that population stabilisation should be an important component of adult education programme. Unless population was stabilised there would be greater exploitation of natural resources which would be a greate hindrance in the march towards sustainable development. He said that adult education should help the people to find solutions to day to day problems.

Prof. KP Nautiyal, Vice-Chancellor of the Garhwal University said that education of adults should receive the same priority as education of children in the Ninth Five Year Plan as both were complementary and supplementary to each other. In adult education, rural areas should get priority, he emphasised. Prof. Nautiyal said that environment education should be an integral part of adult education programme.

Prof. BS Garg, President, IAEA in his address said that adult education should be made relevant to the needs and aspirations of the people. He said that education of women should receive priority. He stressed that their should not be time gap between the motivation and supply of material to the adults.

Shir BL Parakh, Vice-President, IAEA and Chairman of the Central Zone in his presidential address stressed the need to provide education and empowerment to women to enable them to play a meaningful role in social development.

Earlier, Dr. Arun Mishra, Director, Department of Adult, Continuing Education and Extension of the University in his welcome address said that participation of the masses was essential for the success of the programme.

Shri KC Choudhary, General Secretary, IAEA outlined the objectives of the Zonal Conference.

Shri AL Bhargava, Associate Secretary, IAEA and Secretary of the Zone proposed a vote of thanks.

The delegates were divided into three groups to discuss the following sub-themes :

- (a) Role of Universities in Adult Education
- (b) Role of Voluntary Agencies in Adult Education
- (c) What should be the strategies to accelerate Adult Education programme in the Central zone.

### **Recommendations**

After two-days of deliberations the Conference made the following recommendations :

1. The Central Zone Conference on Adult Education held in Srinagar (Garhwal) on June 12-13, 1998 notes with concern that budget allocation for Adult Education has been reduced in the year 1998-99. This it feels will slow down the pace of adult education in the country and will particularly effect the states of the Central Zone i.e. Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh which are lagging behind in literacy as compared to other states in the country. It urges the Government to increase funds for adult education as literacy among parents will accelerate the process of Universalization of Primary Education.
2. The Conference urges the Government to study in depth all the programmes of adult education launched in India since Independence and the future programme of adult education should be based on appraisal of earlier programmes.
3. It feels that training of adult education functionaries is still very weak and all efforts should be made to strengthen the training programme. The success of adult education will depend on the meaningful conduct of the training programme.
4. The Conference feels that the number of learners specified for a centre is rarely achieved. It therefore, stresses, that a volunteer should teach one or two learners only. This will give better picture of adults made literate rather than fudging figures.
5. The Conference notes with satisfaction that at certain places

Panchayats are being given complete responsibility for eradication of illiteracy. This is a welcome trend and should be followed in all states of the zone. The Panchayats should be provided funds and facilities for the purpose.

6. The education and empowerment of women should be a priority programme as literacy among women is very low in the Zone. The adult education programme for women in addition to literacy education, should develop self confidence among them, destroy superstitions and create a spirit of scientific temper.
7. It feels that universities can play a meaningful role in training, preparation of teaching/learning material, research, monitoring and evaluation. Their services should be utilised in this regard and adequately funded for the purpose.
8. The Conference feels that the voluntary organisations as grassroots level organisations should be allotted specific area under the TLC District to undertake literacy programme and should also be encouraged and funded to undertake innovative and experimental projects so as to give new thrust to the adult education programme.
9. The Conference feels that the funds sanctioned by the Government/UGC are not released in time as a result the work suffers and desired results are not achieved. It urges that the funds be released in time so that the programmes should run without any hindrance.
10. It feels that at certain times the implementing agencies are critic to each other which affects the programme. The conference recommends that there should be a provision of inter-agency monitoring and evaluation at different levels.
11. It recommends that Departments of Adult, Continuing Education and Extension of different Universities should be given a statutory status in the university general system.
12. The conference recommends that to make ZSS more powerful and effective the Secretary of ZSS may be delegated some financial and administrative powers as suggested by the Adult Education Panel for the next five year plan.
13. The conference recommends that there should be coordination committees for the cluster of districts in the various states to discuss various problems of TLC and PLC programmes and find out solutions.
14. The conference recommends that at the grass-root level there should be elder's men council to help and guide the implementation of the programme.

□

## **Lokshala Programme : An Alternative Model of Universalisation of Elementary Education**

The Lokshala Programme for Universalisation of Elementary Education (UEE) was started in May 1995 by Bharat Jan Vigyan Jatha, New Delhi with academic support from the Maulana Azad Centre for Elementary and Social Education, Department of Education, University off Delhi.

It is envisaged as a nation-wide social intervention for the improvement of access to equitable quality of school education for all children of India. The basic strategy involves increasing levels of community assertion coupled with decentralisation in the Government School system. The objective is to empower the government school network and to create conditions for realisation of the common school system.

The programme is an attempt to evolve and demonstrate an alternative model of UEE.

It feels that over-centralised, hierarchical and bureaucratised structure of Government school system is not in consonance with the objective of universal enrolment, universal retention and universal learning. Any significant improvement in access and quality of school education will come about only through systemic intervention by the local communities leading to their active participation and assertion in decision-making.

It perceives that the 'world of knowledge' must be related to the 'world at work' in order to make knowledge meaningful and relevant. The learning during the early years must be through mother tongue for all children irrespective of class background.

It has established four Advanced Field Laboratories (AFLs) with the aim of placing elementary education on the agenda of higher education. Four AFLs are working in Delhi, Hoshangabad (MP), Jahanabad (Bihar) and Debitala block Dhubri District (Assam).

UGC has awarded twelve teacher fellowships for the programme.

Further information : Prof. Anil Sadgopal, National Convenor, Bharat Jan Vigyan Jatha, 86 A, Block 22, DDA Flats, Sarai Kale Khan II, New Delhi-110013.

□

## **New Guidelines for Implementation of Continuing Education Scheme**

A new scheme of Continuing Education for neo-literates was approved by the Government of India during 1995-96. To firm up the guidelines for the implementation of the scheme, two workshops were held at Hyderabad and Ahmedabad during 1996. Based on the deliberations of the workshops, guidelines for implementation have been revised which are given below :

1. The Continuing Education Centres (CECs)/Nodal CECs will run for a minimum period of six hours per day. The actual timing will be decided by the local community.

2. For setting up CECs the community participation should be ensured. Where community provide space for CEC, priority should be given to such place for establishing the Centre.
  3. The Centre can also be set up in any of the public building available in the village, like local School, Anganwadi, Panchayat Bhawan, Community Centre etc.
  4. In the selection of the Prerak local community should be involved. The minimum qualification is secondary school certificate but ZSS can give relaxation when candidates with this qualification are not available. Prerak should have worked in TLC/PLC either as a volunteer trainer, Master Trainer or Key Resource Person and should be in the age group 20-35.
  5. The Nodal Prerak should be chosen by the Zilla Saksharta Samiti in consultation with local Block Development Office. The minimum qualification for Nodal Prerak would be a degree.
  6. To run the programme on a long term basis, a corpus fund should be created by the community inviting donations from members and local philanthropic persons.
  7. The NGOs should be involved in implementation of the scheme. Wherever the voluntary agencies have set up or are going to set up the continuing education centres, the ZSS will not duplicate. The voluntary agencies will not be provided money for setting up the centre if ZSS sets up the centres.
- The focus of the CE programme would basically be on the following.
- (a) The Prerak should be equipped to teach the left out non-literates after the conclusion of TLC/PLP phase.
  - (b) Retention of literacy skills and their functional utilisation through the libraries and other programmes.
  - (c) The CE Centre should be an information centre particularly on the development schemes of different Governmental departments.

□

### **Changing Trends in Library and Information Science**

A national Seminar on Changing Trends in Library and Information Science was recently organised at th Cochin University of Science and Technology.

Dr. K. Babu Joseph, Vice Chancellor of the University, who inaugurated the seminar urged the industries to make use of the new information resources that would be made available from the library. Prof. (Dr.) K.S. Raghavan, Professor and Head of the Department of Library and Information Science, Madras University, in his keynote address, referred to the advances in telecommunication and technology. He pointed out that the library and information profession in the country did not take advantage of the data communication networks and did little to develop data base of resources available within the country. He also stressed that libraries would be

increasingly regarded as facilitators of access to information rather than as a storehouse of information materials.

The seminar made the following recommendations :

1. The card form of catalogue be replaced by computerised catalogue.
  2. Library science education in the country should be attuned to mould library professionals who can take up new challenges.
  3. Information base be developed so that the gap between developed and developing countries can be reduced.
  4. Immediate steps be taken to prompt the government to formulate a National Information Policy to help uniform development of information technology in India.
  5. Information systems should be planned and implemented with active involvement of the top management.
  6. Acquisition of new media of information particularly publications on CD-ROM and access to online sources need to be encouraged in Libraries.
  7. Instead of possessing every bit of information required for satisfying the requirement of all users in a library, the importance has shifted to providing increased access to the needed information. This kind of access is possible by developing an Intranet and linking the same to Internet.
  8. Internet based information retrieval be introduced in Libraries in order to make communication process more flexible.
  9. Institutions should take immediate steps to develop union catalogues of the collections available in various departments so that all the resources available can be put to optimum use.
- Libraries should acquire network connection to make use of the large amount of unused information available on Internet.
- Librarian should educate the user to retrieve the relevant documents.
10. University Libraries should organise frequent refresher courses with practical training in information handling for library professionals. □

### **Training Course in Book Publishing**

A Sub-Regional Human Resources Training Course on Book Publishing under APPREB Programme for 1996-97 was organised by the National Book Trust, India in New Delhi recently. The training programme was assisted by Asia/Pacific Cultural Centre for UNESCO, Tokyo.

The objective of the course was to provide basic skills to the personnel from State Resource Centres of Adult Education in India engaged in publishing adult education material.

16 persons participated in the training course-one each from the states of Orissa, Uttar Pradesh, Tamil Nadu, West Bengal, Bihar, Delhi, Haryana, Jammu & Kashmir and Andhra Pradesh. Representatives from Bangladesh, Bhutan, Nepal, Pakistan and Sri Lanka also attended.

The topics covered were different aspects of editing, book design and illustrations, book production, sales & marketing and distribution. Allied areas

like copyright, co-publishing and role of libraries were also discussed. The emphasis was on low-cost production and distribution since the trainees were by and large handling material which called for low production cost. An overview of the Indian book publishing scene was also included as a starter of the programme.

In his welcome address, Dr. Sumatheendra Nadig, Chairman NBT, discussed about the various problems faced by the Indian book industry and observed that these were more or less common with other countries of South Asia. He stressed the need for regional cooperation and hoped that the training course would help the participants to identify possible solutions to their common problems and issues. Dr. Nadig also emphasized the need for developing and bringing out low-cost publications and distributing them widely and taking them to the readers wherever they may be.

Shr P R Dasgupta, Secretary, Department of Education in the Ministry of Human Resource Development, Govt. of India inaugurated the training course. In his inaugural address he stressed the need for organising such training programmes to enhance regional cooperation in the dissemination of knowledge.

At the valedictory session Chief Guest was Mr. J Veera Raghavan, former Secretary, Ministry of Human Resource Development, Government of India and now Director, Bhartiya Vidya Bhawan, New Delhi. Mr. Veera Raghavan in his brief speech observed that despite the onset of the electronic media, the book industry had a bright future, since books had certain qualities not possessed by any other media. He advised that the book trade must tie up the loose ends and ensure that books reach the ultimate reader. He also stressed the significance of human factor in book publishing and the need to achieve cost effective book production.

Dr. Sumatheendra Nadig in his remarks said that if it was difficult to take the reader to the book, let books be taken to the reader particularly for readers in far-flung areas. □

### **Population Regulation Stressed at Asian Parliamentarians' Meet**

Inaugurating a two-day conference of Asian parliamentarians and legislators on Population and Development in New Delhi on 4th April 1998, Vice President of India Krishna Kant underlined the need for regulating population growth and preserving the environment to ensure a better quality of life. He further added that population needed to be viewed from the standpoint of the dent it made on world resources observing that a nation which cannot produce adequate amount of resources has a population problem. Hence there was a need to maintain a balance between population size, available resources and the ability of the economy to provide basic needs like child care and nutrition, primary education, safe drinking water, sanitation and family planning.

Organised jointly by the Indian Association of Parliamentarians on Population and Development and the Tokyo-based Asian Population and

Development Association, the Conference aimed at examining the progress made by the participating countries regarding the plan of action adopted at the Cairo meet held in September 1994.

Mr. Hirofumi Ando, Deputy Executive Director, UNFPA said that India needs to have a stronger political commitment to make its population programmes a success even though it has shown some very positive trends. A lot needed to be done to educate the masses to bring down the maternal mortality rate which was still high in India.

Dr. Urmilablen Patel, MP and Vice-President, Asian Forum of Parliamentarians for Population and Development suggested the setting up of a World Food Bank to provide timely, adequate food to nations that were deficient in food requirement, either temporarily or chronically. It was the turn of parliamentarians to convince their governments about the need and feasibility of such an arrangement. □

### **China Adopts New Population Policy**

China, the world's most populated nation, has adopted a new blueprint for population control, making family planning its most fundamental policy. The blueprint for the next 50 years endorsed by the government states that China's total population should not exceed 1.3 billion by 2000; kept below 1.4 billion till 2010; and the population growth rate should decrease further by the year 2021.

According to the official 'China Daily' newspaper, the new policy embodies China's ambition to rein in population growth in line with sustained social and economic development. □

### **International Conference on Reproductive Health**

A Five-day International Conference on Reproductive Health was organised by the Indian Society for the Study of Reproduction and Fertility, Mumbai in collaboration with UNDP/UNFPA/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction in Mumbai on March 15-19, 1998.

The Conference was inaugurated by Dr. (Mrs.) Banoo J. Coyaji, Chairperson K.E.M. Hospital Research Society, Pune on 15th March 1998 at the Homi Bhabha Auditorium, Tata Institute of Fundamental Research, Mumbai. The scientific sessions including plenary sessions, simultaneous symposia and panel discussions were held.

Various aspects of service delivery and research in reproductive health were discussed and included a sharing of country experiences. □

### **Reducing Gender Biases**

Investment in women's capabilities and empowering them to exercise their choice is not only valuable in itself, but is also the best way to contribute to

economic growth and overall development. This view may well be shared by the elite, but the reality is very different. The majority of the women are still tradition bound and enmeshed in the web of male domination, which largely incapacitates them from leading more meaningful lives. A platform was provided to activists engaged in women's issues, to evolve effective strategies for elevating the status of women during the national workshop on "Women and Gender Equality" organised by the Vishwa Yuvak Kendra on April 1-3, 1998. Recommendations were made after highlighting the present status of women in society with particular emphasis upon the problems encountered by them, youth intervention in the emancipation of women, attitudinal changes essential for gender equality and Governmental and Non-Governmental efforts for empowering women.

Thirty-three youth workers representing NGOs from different part of the country participated in the workshop. □

### **Over a Billion People Live on Less Than \$1 A Day**

Despite huge strides in poeverty reduction over the past 40 years, 1.3 billion people live on less than \$1 a day and almost 3 billion on less than \$2 a day says a recently released report, "Poverty Reduction and the World Bank : Progres in Fiscal 1996 and 1997."

Though some indicators such as life expectancy show clear improvements, marginalisation of certain groups on social grounds in some countries has caused concern. The Report points out that bringing these people into the socio-economic mainstream is the key to achieving sustainable growth in development countries. According to the Report, although the overall trends in developing countries show significant progress in poverty reduction, by region the results are mixed. Poverty has declined in the Middle East, North Africa and parts of South Asia. In India, while the incidence of poverty has fallen, the absolute number of poor people continues to rise. In Eastern Europe and Central Asia both the incidence and absolute numbers of the poor have arisen. The incidence of poverty continues to be high in Sub-Saharan Africa where the world's poorest people live.

The World Bank has also outlined its strategy for better monitoring assessment and inclusion of low-income people who benefit from programmes and projects it assists. □

### **Global Conference on Literacy and Social Change**

The Action Aid India will be organising the REFLECT Global Conference on "Radical Approach to Literacy and Social Change" in Bhubaneswar (Orissa) on November 3-7, 1998.

Further information : Ms Vasumati, REFLECT GLObal Conference, Action Aid India, 3, Rest House Road, Bangalore -560025; Fax : 090-5586284. □

### **Durgabai Deshmukh Award for Women's Development**

The Central Social Welfare Board (CSWB) has instituted an award for women's development in the memory of Dr. Durgabai Deshmukh, founding chairperson of the CSWB. The award will be given every year to voluntary organisations for excellence in the field of women's welfare and development.

The award carries a cash prize of Rs one lakh and a citation.

The award will be announced every year on the 13th August which is the foundation day of the Central Board. □

### **S. N. Saraf No More**

Dr. S. N. Saraf, Former Vice-Chancellor, Sri Sathya Sai Institute of Higher Learning, Anantpur (A. P.) died in New Delhi recently. He was a Life Member of IAEA. □

### **N.A. Anasari is Dead**

Dr. NA Ansari, former Joint Director, Directorate of Adult Education, Government of India and a Life Member of IAEA died in New Delhi on June 12, 1998. He was 73.

He was associated with adult education for about five decades and has written extensively on different aspects of adult education. □

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The Indian Adult Education Association founded in 1939, aims at improving the quality of life through education visualized as a continuous and lifelong process. It directs its efforts towards accelerating adult education as a process, a programme and a movement.

The Association co-ordinates the activities of various agencies--Governmental and voluntary, national and international--engaged in similar pursuits. It organises conferences and seminars and undertakes surveys and research projects; it endeavours to up-date and sharpen the awareness of its members by bringing to them from all over the world expert views on, and experiences in, adult education. In pursuit of the policy, the Association has instituted the Nehru Literacy Award and Tagore Literacy Award for Women's Literacy, for outstanding contribution to the promotion of adult education in the country. It has also instituted the Dr. Zakir Husain Memorial Lecture, which is delivered every year by an educationist of eminence.

The Association has brought out many publications on themes relating to adult education, including the Hindi editions of several UNESCO publications. It brings out the Indian Journal of Adult Education, Proudth Shiksha, Jago aur Jagao and IAEA Newsletter.

The Association acts as the Indian arm of the International Council for Adult Education, International Federation of Workers' Education Associations and the Asian-South Pacific Bureau of Adult Education. Its membership is open to all individuals and institutions who believe in the aims and objectives of the Association.

Its headquarters are located in the Shafiq Memorial at 17-B, Indraprastha Estate, New Delhi- 110002.

*Indian Journal of*

# **Adult Education**

**Role of Education and Training  
in  
Disaster Management**



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## **OUR CONTRIBUTORS**

*Vinod K. Sharma* is Professor, National Centre for Disaster Management, Indian Institute of Public Administration (IIPA), New Delhi

*Kazi M.B. Rahim* is Professor in Agricultural Economics, Hony. Director, Agro Economic Research Centre and Secretary, Natural Disaster Management Cell, Visva-Bharati, Santiniketan, West Bengal

*Dr. JN Upadhyay* is Professor of Rural Studies and Coordinator, National Centre for Disaster Management, IIPA, New Delhi

*N. Vinod Chandra Menon* is Professor, Centre for Disaster Management, YASHADA, Pune, Maharashtra

*JL Sachdeva* is Director, Indian Adult Education Association, New Delhi

*B.B. Mohanty* is former Resident Director, Indian Institute of Mass Communication, Dhenkanal, Orissa and Vice-President, Indian Adult Education Association, New Delhi

*A.W. Khan* is Vice-Chancellor, Indira Gandhi National Open University, IGNOU, New Delhi

*B.S. Garg* is President, Indian Adult Education Association, New Delhi

## **Editorial**

Communication is an important component of management. Disaster management also has certain communication tasks inherent in it. Whether it is awareness building through forecasting and warning, or education and training during the pre-disaster stage, there is a communication task involved in it. An important communication task is dissemination of meaningful information on relief measures undertaken during the disaster and pre-disaster stages.

How does Communication differ from Information? Communication, when seen as a process, has Information as its contents. The concept of IEC (Information-Education-Communication) has been oversold, and that too with a conceptual distortion, by the international agencies, and following them, by the Government. It is Education, not Communication, which should be the third element in the much talked about IEC (Information-Education-Communication) chain. Actually, the chain should be ICE (Information-Communication-Education) and not IEC, because, any effective communication leads to behavioural change, for which Education alone is the most effective change agent. Hence the ICE model.

Appropriate media, both traditional and modern, should be used for disaster management so as to be in tune with the operation of the ICE model. Message design is an important task, and the concerned media people have to be trained in message design and treatment. As has been highlighted elsewhere in this issue, India should have a National Institute of Communication and Education in Disaster Management (NICEDM) having effective relationship with other communication institutes and university departments of journalism and communication.

Vinod K. Sharma

## Natural Disaster Management – An Overview

### Disasters

Disaster is defined as

*“— a serious disruption of the functioning of a society, causing widespread human, material, or environmental losses which exceed the ability of the affected society to cope using its own resources.”*

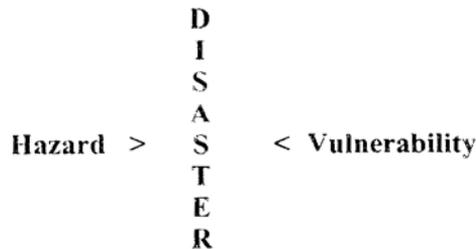
The traditional view is that earthquakes, floods, famines etc. are extreme natural phenomena that cause damage and loss of life i.e. that the more severe the force of the phenomena the greater the losses. This position is only partially accurate as the scale of damage and destruction always depends on what might be affected. A natural phenomenon such as an earthquake only becomes a disaster when something is exposed to it and damaged such as people and buildings. The size of the disaster therefore varies depending on the number of elements that can be damaged and their ability to withstand the forces of the phenomena. For example, well constructed buildings will suffer less damage than weaker ones.

Hence the damage from a disaster will depend on

1. The impact, intensity and characteristics of the phenomenon
2. How people, environment and infrastructure are to be affected by that phenomenon.

A disaster is the product of a hazard such as earthquake, flood or windstorm coinciding with a vulnerable situation which might include communities, cities or villages. There are two main components in this definition: hazard and vulnerability. Without vulnerability or hazard there is no disaster.

The relationship between hazard and vulnerability is best represented in the pressure and release or “Crunch Diagram”.



This relationship can be written as an equation:

$$\text{Disaster Risk} = \text{Hazard} + \text{Vulnerability}$$

To understand this equation it is necessary to understand its two key components: hazard and vulnerability.

### **Hazards**

Hazards are defined as

*"Phenomena that pose a threat to people, structures or economic assets and which may cause a disaster. They could be either man-made or naturally occurring in our environment."*

(Disaster Preparedness Training Manual, Philippine National Red Cross, 1994)

There are four basic types of hazardous events which put societies at risk:

1. Those based in **nature**:  
Earthquakes, droughts, floods, avalanches etc.
2. Those based in **violence**:  
War, armed conflict, physical assault etc.
3. Those based in **deterioration**:

Declining health, education and other social services: environmental degradation etc.

4. Those based in the **failings of industrialised society**:  
Technological failures, oil spillage, factory explosions, fires, gas leakages, transport collisions

Hazards are often categorised as being either natural, man made, fast impact or slow onset in origin. In reality this is an over simplification as there are major variables and features which distinguish each hazard type. For example, whilst floods and earthquakes may all be considered fast impact hazards they all occur within different time scales and levels of predictability. Although there are increasingly accurate means of monitoring floods, there are currently no technologies available to accurately predict the intensity, location and precise timing of earthquakes.

It is also important to note that the distinction between "natural" and "man-made" is increasingly blurred: many destructive phenomena are interrelated and may be "complex". For example, a natural event such as an earthquake may result in secondary hazards such as landslides and urban fires. Alternatively a prolonged flood may leave a legacy of epidemics.

The complex nature of many disasters can also go beyond secondary effects. In some cases a major disaster may be caused by the interaction of differing hazards and processes of change. An example of this can be seen in many African famines: a lack of rain and subsequent drought does not always turn into a famine. However, when combined with failed market systems, political discord and internal conflict, drought can easily become a famine which in turn compounds the negative effects of these other factors.

Once the differing characteristics of the phenomena to be faced are understood an appreciation of the elements at risk and their potential to be affected needs to be ascertained in order to explain the size and scale of a disaster.

**Vulnerability**

Vulnerability is defined as:

*“The extent to which a community structure service or geographic area is likely to be damaged or disrupted by the impact of particular hazard on account of their nature construction and proximity to hazardous terrain or a disaster prone area.”*  
(DMTP. 1991 p.53)

This susceptibility to be damaged or affected will be different to each type of threat and will depend on their differing characteristics. For example the following table illustrates a number of potential threats and the elements at risk.

| Hazard                  | What is at Risk  |
|-------------------------|--|
| Floods                  | Everything located in flood plains. Crops, livestock, machinery, equipment, infrastructure, weak buildings, their contents, people, local economy. |
| Earthquakes             | Weak buildings, their occupants and contents, machinery, equipment, infrastructure.  |
| Volcanic Eruptions      | Anything close to volcano. Crops, livestock, people, combustible roofs, water supply.  |
| Landslides              | Anything located on or at base of steep slopes or cliff tops, roads, and infrastructure, buildings on shallow foundations.                         |
| Technological disasters | Lives and health of those involved or in the vicinity. Buildings, equipment, infrastructure, crops and livestock. Local economy.                   |

**The Disaster Cycle**

There are three key stages of activity within disaster management:

1. **Before a disaster:** to reduce the potential for human, material, or environmental losses caused by hazards and to ensure that these losses are minimised when disaster strikes.
2. **During a disaster:** to ensure that the needs and provisions of victims are met to alleviate and minimise suffering.
3. **After a disaster:** to achieve rapid and durable recovery which does not reproduce the original vulnerable conditions.

Traditionally people think of disaster management only in terms of the emergency relief period and post-disaster rehabilitation. This bias occurs since these two

elements are by far the strongest in terms of high profile visibility, political support and funding provision. Instead of allocating funds before an event to reduce future disasters action normally only takes place after an event has occurred. The situation is similar to that of preventive health care where curative medicine is relatively well funded whilst preventive medicine is not.

The Disaster cycle consists of three stages:

**1. Disaster event**

This refers to the “real-time” event of a hazard occurring and affecting elements at risk. The duration of the event will depend on the type of threat: ground shaking may only occur for a matter of seconds during an earthquake whilst flooding may take place over a longer sustained period.

**2. Recovery**

Recovery is used to describe the activities which encompass the three overlapping phases of emergency relief, rehabilitation and reconstruction.

\* **emergency relief** - refers to the period immediately following the occurrence of a disaster when steps are taken to meet the needs of survivors in respect to shelter, water, food and medical care. Activities undertaken during and immediately following a disaster include immediate relief, rescue, damage and needs assessment and debris clearance.

\* **rehabilitation** - activities that are undertaken to support the victims’ return to “normal” life and re-integration into regular community functions. Rehabilitation includes the provision of temporary public utilities and housing as interim measures to assist longer term recovery.

\* **reconstruction** - good reconstruction attempts to return communities to improved pre-disaster functioning. It includes the replacement of buildings, infrastructure and lifeline facilities so that long-term development prospects are enhanced rather than reproducing the same conditions which made an area or population vulnerable in the first place. Mitigation measures can effectively be incorporated into reconstruction since there is generally an “openness” to change and improved safety following a disaster event.

**3. Risk reduction: mitigation and preparedness**

Reducing the risk of disasters involves activities which either reduce or modify the scale and intensity of the threat faced or by improving the conditions of elements at risk.

Although the term ‘prevention’ is often used to embrace the wide diversity of measures to protect persons and property its use is not recommended since it is misleading in its implicit suggestion that natural disasters are preventable. The use of *reduction* to describe protective or preventive actions which lessen the scale of disasters is therefore preferred. Even with effective **preparedness and mitigation** measures being in place it is realistic to expect some level of damage from extreme natural forces.

Risk reduction can take place in two ways:

### **1. Preparedness**

This protective process embraces measures which enable governments, communities and individuals to respond rapidly to disaster situations to cope with them effectively. Preparedness includes the formulation of viable emergency plans, the development of warning systems, the maintenance of inventories and the training of personnel. It may also embrace search and rescue measures as well as evacuation plans for areas that may be 'at risk' from a recurring disaster.

Preparedness therefore encompasses those measures taken before a disaster event which are aimed at minimising loss of life, disruption of critical services, and damage when the disaster occurs. All preparedness planning needs to be supported by appropriate legislation with clear allocation of responsibilities and budgetary provisions.

### **2. Mitigation**

Mitigation embraces all measures taken to reduce both the effect of the hazard itself and the vulnerable conditions to it in order to reduce the scale of a future disaster. Therefore mitigation activities can be focused on the hazard itself or the elements exposed to the threat. Examples of mitigation measures which are hazard specific include modifying the occurrence of the hazard, e.g. water management in drought prone areas, avoiding the hazard by shifting people away from the hazard and by strengthening structures to reduce damage when a hazard occurs.

In addition to these physical measures, mitigation should also be aimed at reducing the physical, economic and social vulnerability to threats and the underlying causes for this vulnerability. Therefore, mitigation may incorporate addressing issues such as land ownership, tenancy rights, wealth distribution, etc.

## **Key Actors in Disaster Management**

This topic introduces the range of participants or 'actors' who are involved in disaster situations. They may proceed a crisis or they may follow it during the recovery process.

All the actors have three points in common, and they are dependent on each being effective:

- \* Each actor needs an effective organizational structure and mandate.
- \* Each actor need a series of effective policies to pursue that are focused, realistic and based on current information.
- \* Each actor is made up of people who need to be committed to the task, knowledgeable, possessing appropriate skills.

It is important to note that these variables can be interdependent. Hence a good organizational structure may not produce effected policies but there are reliable staff able to perform well. The essence, therefore, is to aim for effectiveness in structure, policy and personnel through training careful planning and co-ordination.

Disaster reduction can be seen as a culture that is shared by a variety of actors. Although their perspectives and approaches may differ, it is only through their efforts that disaster reduction programs will have a chance of being successful.

Actors are organized at various levels in the community, in non-governmental, formal and non-formal organizations. The government is involved through local authorities, national planning bodies and ultimately in the national leadership. For this reason the actors are identified as:

1. community organizations
2. non-governmental organizations (NGOs)
3. government

A successful strategy for risk reduction will eventually incorporate mitigation into everyday practice. This happens in other walks of life, for example the requirement of road testing of vehicles to stay on the road, or the adherence to building codes for safe building in new (formal) construction. A further example is the way with which preventative medicine has now been accepted as a normal process of public health care. Pre-requisites to enable this are:

1. The commitment to mitigation of key actors including communities, government, its agencies and NGOs.
2. The integration of mitigation to all stages of the disaster cycle, including in particular the stages of disaster, relief, rehabilitation.
3. After risk assessment has taken place there is a need to prioritise mitigation actions towards protecting key elements within a society. Measures taken will be either structural or non structural in nature.
4. Active mitigation measures which promote rather than enforce risk reduction are more successful - those at risk need therefore to understand why mitigation is necessary, a process which can be achieved in part through training.
5. Mitigation planning needs regular review and evaluation to meet the threats posed by ever changing hazard characteristics and vulnerability.
6. The normalisation of mitigation within a society is the hallmark of strides towards effective risk reduction.

Events in the past decade indicate that disaster preparedness planning works. Countries with effective and detailed disaster preparedness planning activities have managed to anticipate problems and plan for them. This key topic has provided an overview of disaster preparedness planning, its elements and examples of practice. A particular focus has been to provide an understanding of the need for systematic planning which is required for the effective preparedness of all aspects of disaster mitigation and emergency response.

### **Situation in India**

In view of the frequency of natural disasters in the country, a well structured and integrated disaster administration mechanism has evolved over the years. Besides,

a number of organisations who supplement the efforts of the government at central, state and district levels and provide vital input during emergencies and for preparedness and rehabilitation measures have also been now recognized.

The unique geo-climatic conditions of the Indian subcontinent make this region among the most vulnerable to natural disasters in the world. Disasters occur with amazing frequency and while the community at large has adapted itself to these regular occurrences, the economic and social costs continue to mount year after year.

Indeed, concurrent to these occurrences, the government at various levels too, have responded by taking appropriate measures for prevention and mitigation of the effects of natural disasters. While long term preventive and preparedness measures have been taken up, the unprecedented nature of the disasters has called in for a nationwide response mechanism wherein there is a pre-set assignment of roles and functions to various institutions at central, state and the district level.

India has a Parliamentary Democracy with a Federal Structure. An integrated disaster management mechanism exists within this government framework. The essential responsibility of disaster management lies with the State Government where the disaster has occurred, however in the event of disasters which are spread over several States and with uncontrollable proportions, the central government may be required to supplement, taking appropriate measures, in rescue, relief and preparedness. At the central level the National Crisis Management Committee oversees all disaster related efforts. The Committee comprises the nodal ministry and other support ministries. For natural disasters, the nodal ministry is the Ministry of Agriculture.

The Indian subcontinent is highly vulnerable to Drought, Floods, Cyclones and Earthquakes, though Landslides, Avalanche and Bush fire too frequently occur in the Himalayan region of northern India. Among the 31 States/ Union Territories in the country, 22 are disaster prone. The States are further subdivided into administrative units called districts - there are 443 districts of which 271 are most disaster prone.

On an average, 4,888 people are killed and 59 million get affected annually by various types of disasters (World Disasters Report, 1994).

*Floods:* Of the total annual rainfall in the country, 75% is concentrated over a short monsoon season of three to four months. As a result there is a very heavy discharge from the rivers during this period causing widespread floods. As much as an average of 6.7 million hectare of land is flooded annually. The maximum affected area by floods was 17.53 million hectare in 1978.

*Drought:* is perennial feature in some states of India. 16% of the country's total area is drought prone and approximately 50 million people are annually affected by droughts. In fact drought is a significant environmental problem too as it is caused by a less than average rainfall over a long period of time. In India about 68

percent of total sown area of the country is drought prone. Most of the drought prone areas identified by Govt. of India lie in the arid, semi arid and sub-humid areas of the country.

*Cyclones:* India has a very long coast line of 5700 km which is exposed to tropical cyclones arising in the Bay of Bengal and Arabian Sea. The Indian ocean is one of the six major cyclone-prone regions of the world. In India cyclones occur usually between April and May, and also between October and December. The eastern coast line is more prone to cyclones as about 80% of total cyclones generated in the region hit there. In the recent past the Andhra Pradesh cyclone of November 1977 is considered as one of the worst, in which about 10,000 people lost their lives and about 230,000 cattle were killed. In this cyclone wind speeds measuring 200 km/hr, accompanied by tidal waves over 15 meters high, moved inland upto 12 km., affecting 3.4 million inhabitants.

*Earthquakes:* are considered to be one of the most dangerous and destructive natural hazards. The impact of this phenomena is sudden with little or no warning, making it just impossible to predict it or make preparations against damages and collapses of buildings and other man-made structures. About 50-60% of total area of the country is vulnerable to seismic activity of varying intensities. Most of the vulnerable areas are generally located in Himalayan and sub-Himalayan regions, and in Andaman and Nicobar Islands. The memories of recent earthquake of Latur (September 30, 1993) are still fresh in the minds of the people for the heavy damages due to house collapses and heavy loss of human lives.

## **Administrative Response Mechanism**

### **Central**

In the federal set-up of India, the responsibility to formulate the Governments response to a natural calamity is essentially that of the concerned State government. However, the Central Government, with its resources, physical and financial does provide the needed help and assistance to buttress relief efforts in the wake of major natural disasters. The dimensions of the response at the level of the Central Government are determined in accordance with the existing policy of financing the relief expenditure and keeping in view the factors like.

- (i) the gravity of a natural calamity.
- (ii) the scale of the relief operation necessary, and
- (iii) the requirements of Central assistance for augmenting the financial resources at the disposal of the State Government.

The Department of Agriculture and Co-operation (DAC) in the Agriculture Ministry is the nodal Department for all matters concerning natural disasters relief at the Centre. In the DAC, the Relief Commissioner functions as the nodal officer to co-ordinate relief operations for all natural disasters.

The Central Relief Commissioner receives information relating to forecast/

warning of the natural calamity from the Director General, India Meteorological Department (IMD) or from the Central Water Commission on a continuing basis. Besides, he also monitors the developments taking place and provides the necessary feed-back, through the Agriculture Secretary, to the Agriculture Minister, Prime Minister and the Cabinet.

Various committees working at the national level for the disaster management are as following:

*Cabinet Committee:* The Cabinet may set up a committee for effective implementation of Relief measures in the wake of natural disaster. The Secretary in the Ministry of Agriculture acts as the secretary of this committee. In the absence of such a committee, all the matters related to the relief shall be reported to the cabinet secretary.

*National Crisis Management Committee (NCMC):* Under the chairmanship of the cabinet secretary the NCMC has been constituted in the cabinet secretariat. The other members of this committee include the Secretary to Prime Minister, Secretaries of the Ministries of Home Affairs and Defence; Research and Analysis Wing and Agriculture and Co-operation along with Director Intelligence Bureau and an officer of cabinet secretariat. The NCMC gives direction to the crises management group as deemed necessary.

*Crisis Management Group (CMG):* A group under the chairmanship of the Central Relief Commissioner comprising the senior officers from the various Ministries and other concerned departments to review every year contingency plans formulated by the Central Ministries/Departments; to review the measures required for dealing with a natural disaster, co-ordinate the activities of the Central Ministries and the State Governments in relation to disaster preparedness and relief and to obtain information from the nodal officers on measures relating to the above. The Joint Secretary (NDM) and Additional Central Relief Commissioner is the convenor of CMG. The CMG meets every six months.

At the state level, the State Relief Commissioner (or Secretary, Department of Revenue) supervises and controls relief operations through Collectors or Deputy Commissioners, who are the main functionaries to co-ordinate the relief operation at district level.

## **State**

As pointed out earlier, the central government only supplements the efforts of the State Governments. The State Governments are autonomous in organising relief operations in the event of natural disaster and in the long term preparedness/rehabilitation measures.

The States have Relief Commissioners who are in charge of the relief measures in the wake of natural disasters in their respective states. In the absence of the Relief Commissioner, the Chief Secretary or an Officer nominated by him is in overall

charge of the Relief operations in the concerned State.

The Chief Secretary is the head of the State Administration. The State Headquarters has in addition a number of Secretaries and heads of the various Departments handling specific subjects under the overall supervision and co-ordination of the Chief Secretary. At the level of the State Government natural disasters are usually the responsibility of the Revenue Department or the Relief Department. While important policy decisions are taken at the State Headquarters by the Cabinet of the State headed by the Chief Minister, day-to-day decisions involving policy matters are taken or exercised by the Secretary in the Department.

*States Crisis Management Group:* There is a State Crisis Management Group (SCMG) under the Chairmanship of Chief Secretary/ Relief Commissioner. This Group comprises Senior Officers from the Departments of Revenue/ Relief, Home, Civil Supplies, Power, Irrigation, Water Supply, Panchayat (local self Government), Agriculture, Forests, Rural Development, Health Planning, Public Works and Finance.

The SCMG is required to take into consideration the infrastructure and guidance received, from time to time from the Government of India and formulate action plans for dealing with different natural disasters.

It is also the duty of the Relief Commissioner of the State to establish an emergency operation centre as soon as a disaster situation develops. Besides having all updated information on forecasting and warning of disaster the centre would also be the contact point for the various concerned agencies.

### **District**

States are further divided into districts, each headed by the District Collector (also known as the District Magistrate or Deputy Commissioner). It is the District Collector who is the focal point at the district level of directing, supervising and monitoring relief measures for disaster and for preparation of district level plans.

The Collector exercises co-ordinating and supervisory powers over functionaries of all the Departments at the District level. During actual operations for disaster mitigation or relief, the powers of the Collector are considerably enhanced, generally, by standing instructions or orders on the subject, or by specific Government orders, if so required. Sometimes, the administrative culture of the State concerned permits, although informally, the collector to exercise higher powers in emergency situations and the decisions are later ratified by the competent authority.

A District is sub-divided into sub-divisions and Tehsils or Talukas. The head of a sub-division is called the Sub-Divisional Officer (SDO) while the head of a Tehsil is generally known as the Tehsildar (Talukdar or Mamlatdar in some States). Contact with the individual villages is through the Village Officer or Patwari who has one or more villages in his charge. When a disaster is apprehended, the entire machinery of the District, including officers of technical and other Departments,

swings into action and maintains almost continuous contact with each village in the disaster threatened area. In the case of extensive disasters like drought, Contact is maintained over a short cycle of a few days.

The various measures undertaken by the District Administration are as follows:

*Contingency plans:* At the district level, the disaster relief plans are prepared which provide for specific tasks and agencies for their implementation in respect of areas in relation to different types of disasters.

A contingency plan for the district for different disasters is drawn up by the Collector/ Deputy Commissioner and approved by the State Government. The Collector/Deputy Commissioner also coordinates and secures the input from the local defence forces unit in preparation of the contingency plans. These contingency plans lay down specific action points, key personnel and contact points in relation to all aspects.

*District Relief Committee:* The relief measures are reviewed by the district level relief committee consisting of official and non-official members including the local legislators and the members of parliament.

*District Control Room:* In the wake of natural disasters, a Control Room is set up in the district for day to day monitoring of the rescue and relief operations on a continuing basis.

*Coordination:* The Collector maintains close liaison with the Central Government authorities in the districts, namely, the Army, Air Force and Navy, Ministry of Water Resources etc., who supplement the effort of the district administration in the rescue and relief operation.

The Collector/Deputy Commissioner co-ordinates voluntary efforts by mobilising the non-government organisations capable of working in such situations.

The entire hierarchy, right from the Central Government (the Department of Agriculture and Co-operation in the Ministry of Agriculture and Irrigation) to the District level, and even the Sub Divisional/Tehsil level is connected with a telecommunication system. The normal mode of telecommunications is overland telephone and telegraphy, but at times of stress, and if there is a breakdown of the overland system, radio communication is resorted to. The wireless network is generally run and maintained by the police organisation in the country.

Besides the District officials, a host of other bodies to supplement their efforts in disaster situations - particularly the armed forces and the non - government voluntary organisations.

### **Voluntary Organisations in Disaster Management**

Emerging trends in managing natural disasters have highlighted the role of Non Governmental Organisations (NGOs) as one of the most effective *alternative* means of achieving an efficient communication link between the Disaster Management agencies and the affected community. Many different types of NGOs are at-

ready working at advocacy level as well as grassroots level: in typical disaster situations they can be of help in preparedness, relief and rescue, rehabilitation and reconstruction and also in monitoring and feedback.

The role of NGOs is a potential key element in disaster management. The Non Governmental sector that operates at grassroots level can provide a suitable alternative as they have an edge over Governmental agencies for invoking community involvement. This is chiefly because the NGO sector has strong linkages with the community base, and can exhibit great flexibility in procedural matters vis-a-vis the government.

Based on the identified types of NGOs and their capabilities, organised action of NGOs can be very useful in the following activities in different stages of disaster management.

### **Research and Training Institutions**

In India, a number of Research Institutes are conducting active research in the field of Disaster Management. Valuable inputs in technical, social, economic as well as management areas of the field are being looked into. Research activities are being co-ordinated by different ministries depending on the type and level of research. An important role is played by the Universities too in this sector who, besides running programmes on disaster management, also serve as think tanks for the government. Institutes spread geographically across the country have developed specialisation in terms of particular regions where most of their research is concentrated and also in terms of particular disasters. Notable universities are the University of Roorkee, the Indian Institutes of Technology and the Anna University.

The Department of Science (Ministry of Science and Technology), Government of India, co-ordinates activities through a network of scientific institutes e.g., the Central Building Research Institute at Roorkee. The Ministry of Urban Development carries out research through the Building Materials and Technology Promotion Council on subjects such as appropriate building materials for disaster prone areas. These institutes, besides providing technical assistance to implementing and engineering organisations also train field level officers and other concerned role players.

The Ministry of Agriculture and Cooperation too has set up a National Centre for Disaster Management to look into administrative training activities in the field of Disaster Management. The Centre was established by the Ministry of Agriculture in March, 1995 at the Indian Institute of Public Administration, New Delhi. The NCDM, besides gearing up the national, state and district level administrations to tackle natural disasters, also co-ordinate various research and training programmes and build a data-base on natural disasters.

### **Community**

Recent trends have revealed that the community as an institution in itself is

emerging as the most powerful in the entire mechanism of disaster administration. In the event of actual disasters, the community, if well aware of the preventive actions, it is required to take, can substantially reduce the damage caused by the disaster. Awareness and training of the community is particularly useful in areas which are prone to frequent disasters.

It is laudable that the efforts in certain areas where communities have formed their own organisations which take the right initiative in such situation. One such community based organisation is the Village Task Force formed in the villages of Andhra Pradesh by the Church Auxiliary for Social Action (CASA). The Village Task Force has been trained in emergency evacuation and relief within the village. It is elected by the people themselves and during disasters it serves as the nodal body at village level which has to mobilise resources for the community and disseminate necessary information passed on by the outside agencies.

While the community as an effective institution is yet to take shape in this country with low literacy levels and widespread poverty, considerable efforts are being made to form and strengthen community based organisations at grassroot levels.

**References**

1. Training Materials - Briefing Notes for Tear Fund. Oxford Centre for Disaster Management. Oxford 1997.
2. Natural Disaster Reduction-South Asian Regional Report, Ministry of Agriculture, Government of India 1994.
3. Contingency Action Plan for Natural Calamities. Ministry of Agriculture, Government of India 1990.

**Kazi M.B. Rahim**

## **Abatement of Man-made Hazards – Vis-a-Vis Natural Hazards: Role of Collective Action**

The distinction between natural hazards or disasters and their man-made (or technological) counterparts is often difficult to sustain. Many researchers have called the 'naturalness' of natural disasters into question, though the circumstances of purely anthropogenic hazards, such as oil spills and chemical explosions, are usually very different from those of, for example, earthquake and floods. Nevertheless, in terms of the consequences there is a sizeable overlap (Alexander, 1993). Natural hazards are known to be as old as nature but man-made hazards are of recent origin. Beginning with the industrial era, man's activities started to cause considerable changes in the natural environment. Presently they have reached such a high level that their physical, chemical or biological effects become sometimes similar to the effects of natural hazards and even to the natural phenomena causing disasters (Jovanovic, 1988). Hence, much that is of benefit to the study of natural catastrophe can be learned from technological risks and disasters, and from the manner these interact with the natural counterparts. Man-made risks are important here as the technology has created new sources of risks, and increased old ones. It is also considerable that many aspects of disaster management and risk reduction, developed in response to technological impacts are applicable to natural disasters.

**Table - I Disaster Management  
Definition**

Any odd event, be man-made or natural, which brings about sudden immense miseries to humanity with great intensity and large scale, causing loss of life, damage to property and blockade of national productivity efforts, either partial or complete. is designated as “Disaster”.

| <b>Types of Disaster</b>  |  |
|---|--|
| <i>Man-made</i>   | <i>Natural</i>   |
| i) War/Battles/Hostile enemy actions  | i) <i>Wind based:-</i> Storm, Cyclone, Typhoon, Tornados, Hurricane. Storm Surge, Tidal Waves    |
| ii) Arson/Sabotage/Riots/Internal disturbances                                  | ii) <i>Water based:-</i> Floods or droughts. Dam-bursts, Cloudbursts, excessive rains etc.       |
| iii) Accidents of vehicles-train, aircraft, ship                                | iii) <i>Seismic:-</i> Earthquakes, Tsunamis, Avalanches, Land and Mudslides, Volcanic eruptions. |
| iv) Industrial accidents/explosions of boilers/gas cylinders/chambers           | iv) <i>Geo-thermal:-</i> Volcanic eruptions, Tsunamis.   |
| v) Fire due to human error/negligence   | v) <i>Natural Heat:-</i> Bush Fire/Wild Fire   |
| vi) Nuclear accidents or explosions   | vi) <i>Ecological:-</i> Flash Floods and related land and mud slides and earth-sinkage           |
| vii) Ecological disturbances like deforestation, water pollution, air pollution |  |

**Table - II Interacting influences on consequences between the natural and man-made hazards.**

| Natural Hazards   | Man-Made Hazards  |
|---|---|
| Tsunamis  | <ul style="list-style-type: none"> <li>* Coral reef destruction</li> <li>* Destruction of beach forest and other protective features</li> <li>* Low settlement location</li> </ul>  |
| <ul style="list-style-type: none"> <li>* Natural forest fire</li> <li>* Fires due to lighting</li> <li>* Fire due to volcanic explosions</li> <li>* Landslide</li> <li>* Rock slides</li> </ul> | <ul style="list-style-type: none"> <li>* Bad planning of long distance transport electric lines.</li> <li>* Poor management of forest areas</li> <li>* Lack of protective corridors</li> <li>* Neghligence of fire sensitive areas</li> <li>* Bad road engineering</li> <li>* Open mining</li> <li>* Deforestation</li> <li>* Poor drainage system</li> </ul> |
| Earthquakes   | <ul style="list-style-type: none"> <li>* Underground nuclear testing</li> <li>* Bad planning of water development projects</li> <li>* Deep mining</li> <li>* Sensitive material and construction design of buildings</li> <li>* Dense settlement</li> </ul>   |
| Floods  | <ul style="list-style-type: none"> <li>* Deforestation</li> <li>* Expansion of denuded areas</li> <li>* Destruction of vegetation cover</li> <li>* Erosion of soil cover</li> <li>* Environmental modifications</li> <li>* Poor design of community infrastructure</li> </ul>   |
| Droughts  | <ul style="list-style-type: none"> <li>* Destruction of vegetation</li> <li>* Environmental modifications</li> <li>* Overexploitation of water resource</li> <li>* Pollution/siltation oriented eutrophication leading to death of water body</li> <li>* Alteration of evapotraspiration system</li> </ul>  |
| <ul style="list-style-type: none"> <li>* Cyciones</li> <li>* Hurricanes</li> <li>* Typhoons</li> <li>* Tornados</li> </ul>  | <p>Similar to hazards described under earthquake, floods, tsunamis</p>  |
| Modifications of temperature "homeostasis" of planet earth  | <ul style="list-style-type: none"> <li>* Technologic trace gases and biomass burning influences on formation of "greenhouse" effect and climate change.</li> </ul>  |
| Ozone layer variations  | <ul style="list-style-type: none"> <li>* Technological influence on trace gases concentration leading to ozone layer depletion and UV-B increase and biological perturbations.</li> </ul>   |
| Soil carbon depletion   | <ul style="list-style-type: none"> <li>* Breaking of biogeochemical carbon cycle in agricultural areas.</li> <li>* Overremoval of biomass resources and man-made fires.</li> </ul>  |

## **Man-made hazard: Epidemics caused due to uses, misuses and abuses of water resources**

Throughout the history of human civilisation, the people have always been faced with the problems of disposing liquid wastes in a manner which minimises nuisance and which has a negligible environmental impact. The problems are being exaggerated due to recent civilisation highly depended on modern industrialisation and mushroom urbanisation emerging severe challenges to the eco-system. Waste water is considered harmful both because of the environmental damage it can cause to aquatic eco-systems and also due to the health problems it creates to humans who utilise water contaminated with wastes. It has been estimated that half the world's population suffer from water-related diseases. Most of those affected are poor and almost all live in developing countries (Perry and Vanderklein, 1996, p.401).

An important problems with urbanisation is that it often outpaces infrastructure development. In 1950, only one city in the developing world had a population in excess of 4 million; in 1980, 16 such cities exceeded that mark. Projections suggest that more than 60 of these cities will exist by the year 2000 (Meyback et. al. 1989).

Managing urban waste, now-a-days, becomes a burning issue to the urban planner and manager. Water quality management was considered to be a purely technical subject of hydrology. Currently its scope has now expanded far beyond the determination of water chemistry in the laboratory. It is now a social and political disciplines whose concerns range from ensuing adequate health standards to preserving biological diversity and ecosystem integrity. The water quality management reflects changes in both society and scientific understanding (Perry and Vanderklein, 1996).

The megacity Calcutta, a city of over population with a poor infrastructural base, is facing difficulties in managing its huge waste water. The waste-water in Calcutta are flowing through the canals of different sizes situated within and around the city. These canals carrying waste water are fed mainly by sewage water and also by run-off from paved streets. The sewage water refers to the raw liquid waste collected from houses, buildings and industries, which contain more than human disease agents. 'Run off water from paved streets includes lawn chemicals and fertilizers, waste oil from vehicles, road salt, and other substances. Household waste streams frequently include corrosive cleaning agents, paints and other persistent compounds. Wastes from the industrial sector contain ever greater numbers of toxic pollutants (Perry and Vanderklein, 1996).

Calcutta now-a-days is not able to provide adequate sanitation through the management of waste waters. The citizens of Calcutta are exposed to the epidemic outbreaks of more than 30 diseases carried in human-waste, including cholera, typhoid, scistosomiasis, and diarrhoea diseases. During the recent years the city is busy to fight for tackling the disasters that wrought havoc in the city by malignant malaria. The ever increasing growth of the larvae of *Palsomodium falciparum* (the

parasite of malignant malaria) is due to the increasing inability of treating waste-water of the city.

With the ever increasing urbanisation and industrialisation coupled with aquaculture and agriculture, demand for usable water is increasing. Keeping in view the potentiality, the waste water should be considered as an asset and not a waste. We know resources are not they, but they are made. Treatment of waste water should always consider the potential for reuse of this waste water for irrigation, as process water in industry or in certain situations where it is treated to a very high standard, reused for recharging aquifers for future exploitation as a potable source (Horan 1997). There is therefore an urgent need for their resotation so that they can contribute fully to economic growth and development, and help alleviate the problems of poverty, unemployment and ecological degradation.

To prevent human health and environmental hazards, treatment of waste water is the prime need of the hour. This has vast potentials if properly explored. The various models of sewagefed pisciculture and of sewagefed wet land based urban agriculture are available in different countries of the world. Calcutta too has got several units of sewage fed pisciculture and urban-agriculture which are pro-poor and eco-friendly economic activities. We may draw examples of international experiences ranging from Bangladesh to far-flung Spain. Prism, a voluntary organisation in Bangladesh, has been running a duckweed (Lemnaceae) waste-water treatment system in Mirzapur near central Dhaka and has been helping the Kumudini Hospital complex, catering to 3,500 users for more than five years. Fresh duckweed crop harvested by this system is best utilised as fish feed without processing. The harvested plant biomass (duckweed) from this system may also be used as feed for poultry, piggery and cattle. It may also be used as compost. Duckweed is an encouraging method for adoption in different climatic conditions in comparison to the other aquatic plant.

Statistics in relation to the total waste-water resources, which are mainly sewage fed by Calcutta megacity, are not available. The Calcutta sewage fed waterbodies situated in North 24 Parganas are 1,225.70 hectares. Brackish and Seasonal (Calcutta Sewagefed) waterbodies are 28,298.88 hectares (Mean Bhaban, 1997). Similarly several sewage fed water bodies are available within Calcutta and in the district of South 24-Parganas. Sewage is liquid waste discharged from domestic and industrial sources of the urban area. It is rich in nutrients and thus can be used to enhance fertility of the water bodies. The average annual production of fish from sewage enriched waters in countries like Germany, Rumania, Poland, Hungary, Israel, China and Java is 3 to 4.5 tonnes per hectare. The fish production from Vidyadhari sewage fed fisheries of West Bengal is about 1258 kg. per hectare (Das, 1991).

The Mudially Fishermen's Cooperative Society (MFCS), near Brace Bridge on the South-Western side of Calcutta, the Captain Bheri Fishermen's Co-operative Society (CBFCS) in the Naobhanga area in the South 24 Parganas, Kalyani Sewage-

fed Co-operative Fish Farm and the Bonhooghly Fishermen's Co-operative Society on the North side of Calcutta are some of the unique examples of pisciculture in the sewage fed water bodies after having treatment of the waste-water. Regarding the Mudiaily Fishermen's Co-operative Society, Earthscan, in its monograph "The wealth of Communities : Stores of success in local Environmental Management" by Charlie Pye-Smith and Grazia Borrini Feyerabend along with Richard Sandbrook, called it a success story, although People United for Better living in Calcutta, a city based environmental action group, virtually indulged in slandering the venture which, among other things, converted many erstwhile anti-socials and dacoits into ecology soldiers. (Ghosh Dostidar, 1997). MFCS happens to be a noteworthy one in terms of achievement and pioneering work in the sphere of environment and co-operation (Datta and Kapoor, 1997).

The MFCS is mainly based on 80 hectares of wetland taken on lease from the Calcutta Port Trust (CPT). The wetland is fed by the refuge and polluted water of Calcutta. The society developed a completely indigenous bio-engineering system to perform three important functions: i) improving the waste water quality before releasing it into the Ganges, ii) using the waste water as input to grow fish, and iii) developing an ecologically balanced system to accommodate a number of animals and plant species. The last mentioned function has opened up future opportunities for an ever-increasing variety of business activities of the society, besides producing low-cost sanitation, employment, environmental safety and aesthetic values to the city dwellers. (Datta and Kapoor, 1997).

As Dr. D.J. Ghosh, a noted environmentalist stated: "MFCS has evolved a resource recovery practice which provides a tutorial eco system for the rest of the world, especially to the low lying cities in the tropical climatic regions, such as Dhaka, Bombay, Jakarta and Bangkok" (Ghosh, 1991).

The technical system developed by MFCS for treatment of waste-water as mentioned by Datta and Kapoor (1997) works as follows. The average daily loading of sewage water - approximately 23 million litres, of which about 70 per cent is from industries and the rest from domestic sewage, is passed through the first of six ponds, termed as the 'anaerobic tank', in which the water is treated manually using either liming or biochemicals. Water hyacinth are usually kept near the anaerobic tank to facilitate absorption of the oil, grease and heavy metals in the effluent. Often the tank is dug in order to reduce sludge deposition. The second tank into which water flows from the first through a narrow passage, is the breeding ground for exotic fish which can survive in harsh conditions. The water then flows into the third pond and so on, the water quality improving at each stage and therefore permitting better utilization of the recycled nutrients and mineral contents of the sewage for fish culture. Finally, the water is let into the Manikhal canal system which eventually joins the Hooghly river.

The Captain Bheri Fishermen's Co-operative Society (CBFCS) is also a simi-

lar example of a model for waste water treatment and pisciculture in sewagefed waterbody. CBFCS is located in the Naobhanga area in the South 24 Parganas district of West Bengal. The case study conducted by Singh *et al.* (1996) reveals that CBFCS has 16 hectares of waterbodies under its command of which 13 hectares are used for fish culture and the rest 3 hectares for producing fish seeds/rearing fishings. The water bodies are fed by sewage water of Calcutta City. The effluents and sewage of the City are undergone the natural process of treatment for detoxification and bio-degradation. The whole process takes a few days only. With this natural process of purification, 99.9 per cent of pathogenic coliform bacteria, that are engendered by the sewage, are destroyed.

Kalyani sewage-fed fish farm represents another model of sewage treatment through aquaculture. The entire system as studied by Bhowmik, *et. al.* (1997) involves two stabilisation ponds of 0.5 hectare each, two facultative or oxidation ponds of 1.25 hectares each and a series of four maturation ponds (fish ponds) of 1.0 hectare each, located in such a way that inlets and outlets of ponds placed diagonally facilitating the water course in zig-zag way leading to the river Hooghly. A total of 6 MLD raw sewage is being passed through this system. Observation reveals that considerable amount of reduction in nutrient level and bacterial load has been effected within a period of 1 day, 5 days and 5 and half days retention time in stabilization, oxidation and maturation ponds respectively. The biological system demonstrates a low cost technology for fish production without much infrastructural installations. A reduction of 99.9 per cent in total coliforms, faecal coliforms and faecal streptococci, 93.5 per cent in heterotrophic bacteria, 53.8 per cent in staphylococcus and 59.3 per cent in inorganic nitrogen, 79.1 per cent in inorganic phosphorus and 83.16 per cent in BOD<sub>5</sub> were recorded. The maturation ponds are utilised for fish culture where multiple stocking and multiple harvesting technique is adopted.

Another success story of using sewage fed water bodies for pisciculture after treating the waste water is the Bonhooghly Fishermen's Cooperative Society Limited, which is situated in the Northern side of Calcutta city.

### **Abatement of environmental pollution**

The BFCS has taken 10 hectares of waste-water bodies on lease. The effluents and sewage of Calcutta city which feed the waste-water bodies of the society are undergone through a completely indigenous bio-engineering system for detoxification and purification. In this system the front portion of the waterbodies where the sewage water is disposed is separated from main waterbodies by constructing fence of bamboo sticks. In this portion water-hyacinth (*Eichhornia crassipes*) is grown which facilitates the absorption of the oil, grease and heavy metals of sewage-water and purify the sewage water by natural process.

The nutrients rich water then comes to the main tank where pisciculture is done. The phytoplankton and zooplankton which emerge in the water bodies serve as

food for the fish. The regular netting and rowing (by paddle boat) helps in reoxygenation from the atmospheric oxygen in the water bodies. Thus ultimately when the water is discharged through the drainage canal the BOD level comes to about 10 mg/L. The sewagefed water before purification contains 100 to 150 mg/L BOD. It may be noted that in 1898 the Royal Commission on Sewage Disposal developed the measure called "Bio-chemical Oxygen Demand (BOD)" (Haslam, 1990).

Due to lack of facilities the BFCS is not able to follow the required scientific method, in which there should be a buffer tank where the sewage water will be disposed first and will be allowed for sedimentation of heavy particles and then it should pass through a series of tanks.

**Table 3 : Performance of the Society at a Glance**

Water Area : 10 ha

| <i>Year</i> | <i>Purchase of Fish Seeds in Rs.</i> | <i>Sale of Fish in Rs.</i> | <i>Closing Stock of fish in Rs.</i> | <i>Benefits drawn by the members in Rs.</i> | <i>Salary Paid in Rs.</i> | <i>Net Profit in Rs.</i> |
|-------------|--------------------------------------|----------------------------|-------------------------------------|---|---------------------------|--------------------------|
| 74-75       | Nil                                  | Nil                        | Nil                                 | -   | -                         | -2,695                   |
| 75-76       | 3,457                                | 39,548                     | 10,878                              | 22,726                                      | -                         | +12,397                  |
| 76-77       | 3,560                                | 1,93,222                   | 1,500                               | 48,294                                      | 6,200                     | +18,401                  |
| 77-78       | 13,005                               | 2,20,617                   | 20,500                              | 77,844                                      | -                         | +22,221                  |
| 78-79       | 1,15,159                             | 3,04,597                   | 22,500                              | 72,980                                      | -                         | +50,810                  |
| 79-80       | 16,239                               | 1,17,228                   | 18,000                              | 30,659                                      | 23,899                    | -2,447                   |
| 80-81       | 28,715                               | 1,11,012                   | 24,000                              | 39,333                                      | 31,400                    | +17,400                  |
| 81-82       | 26,439                               | 1,46,116                   | 16,500                              | 57,050                                      | 32,215                    | -12,446                  |
| 82-83       | 64,534                               | 3,65,211                   | 6,500                               | 1,29,561                                    | 38,912                    | +24,801                  |
| 83-84       | 1,06,492                             | 3,75,468                   | 15,920                              | 1,34,239                                    | 60,618                    | +2,956                   |
| 84-85       | 1,02,822                             | 3,63,738                   | 21,000                              | 1,37,253                                    | 53,957                    | +4,910                   |
| 85-86       | 1,10,850                             | 3,85,981                   | 1,20,000                            | 1,50,210                                    | 50,316                    | 19,994                   |
| 86-87       | 1,07,408                             | 5,59,111                   | 1,25,000                            | 2,00,123                                    | 51,807                    | +58,942                  |
| 87-88       | 2,03,985                             | 4,16,595                   | 2,32,000                            | 1,87,867                                    | 53,146                    | -1,498                   |
| 88-89       | 1,23,504                             | 4,99,118                   | 2,15,000                            | 2,15,481                                    | 51,258                    | +38,790                  |
| 89-90       | 2,41,753                             | 13,19,589                  | 5,000                               | 5,67,552                                    | 26,650                    | +6,410                   |
| 90-91       | 2,40,989                             | 9,50,189                   | 36,513                              | 5,01,773                                    | 35,100                    | +18,290                  |
| 91-92       | 1,54,758                             | 6,83,632                   | 1,25,000                            | 3,23,173                                    | 26,325                    | +18,759                  |
| 92-93       | 3,63,139                             | 15,02,050                  | 87,380                              | 7,13,839                                    | 33,825                    | +18,822                  |
| 93-94       | 4,98,833                             | 15,07,050                  | 75,000                              | 7,24,866                                    | 41,775                    | +58,011                  |
| 94-95       | 6,32,629                             | 21,17,682                  | 50,000                              | 7,49,452                                    | 40,500                    | +64,730                  |
| 95-96       | 5,91,369                             | 18,31,720                  | 50,000                              | 7,79,636                                    | 38,775                    | +25,310                  |
| 96-97       | 5,91,581                             | 19,89,203                  | 50,000                              | 8,77,517                                    | N.A.                      | +54,841                  |

Source: BFCS (Annual General Meeting 1997-98)

**References**

1. Alexander, D. 1993. Natural Disasters, UCL Press, London.
2. Bhowmik, M.L.; Chattopadhyay, A.; Manna, N.K. and Pandey, B.K. 1992. Biological Treatment of Sewage with Reference to Microbial Load, Nutrients and Fish Growth, National Seminar on Fish Biology, Visva-Bharati.
3. Das, S.K. 1991. Fishing Chimes.
4. Datta, S.K. and Kapoor, S. 1997. Collective Action, Leadership and Success in Agricultural Co-operatives, A study of Gujarat and West Bengal.
5. Ghosh, D. 1991. Fishery of the First Water, Business Standard, Calcutta, 31st July.
6. Ghosh Dastidar. 1997. Unexplored Areas, The Statesman, 25th November.
7. Haslam, S. 1990. River Pollution: An Ecological perspective, London, Bellhaven Press.
8. Horan, N. 1997. Wastewater Collection, Treatment, Disposal and Reuse in the book "The Global Environment, Science, Technology and Management", Vol. 2- Ed. by Brune, D.; Chapman, D.V.; Gwynne, M.D. and Pacyna, J.M., VCH, A Wiley Company.
9. Jovanovic, P. 1988. Modelling of relationship between Natural and Man-made Hazards, in Natural and Man-made Hazards (Ed. M.I. El-Sabh and T.S. Murty), D. Reidel Publishing Company, Boston, pp.9-20
10. Perry, J. and Vanderklein, E. 1996. Water Quality: Management of a Natural Resources, Blackwell Science Inc. p.401.
11. Singh, Katar, Vishwa Ballabh and Pala Kudiyl, T. 1996. Introduction and Overview in the book, Cooperative management of Natural Resources, edited by Singh Katar and Vishwa Ballabh, Sage Publications.

**J.N. Upadhyay**

## **Role of Education and Training in Disaster Mitigation**

Disaster is a sudden calamitous event disrupting normal life pattern. Disaster cause untold damages to life, property, live stock and other life support systems. The human vulnerability to disasters, especially natural, is an age old phenomenon. The frequency of disasters has gone up in the recent past due to uncontrolled and unplanned activities. Disasters are not caused only due to natural hazards, but a combination of natural forces and human activities, which affect the environment.

Due to increased pressure on land, more and more people are settling down in the earthquake prone areas, flood plains and coastal areas, making these communities highly vulnerable for damages. Experience of recent disasters in the country reveals the following characteristics of the damage scenarios in the aftermath of any disaster :

- It is rural or undeveloped/underdeveloped areas which suffer the most.
- It is the poorer sections of society, who suffer severely.
- It is the weaker sections of society, i.e., women, children, old people, who feel the severity most.

The Indian subcontinent is highly prone to cyclones, drought, earthquakes, floods and landslides, though avalanches and bush fire too occur in the Himalayan region. Among the 31 States/union territories in the country, 22 are disaster-prone. With a wide range of climatic and topographic conditions, the country is subjected to one or other type of disaster very often, such as the severe cyclone in Gujarat in June 1998 followed by severe flooding in different parts of the country. On an average, 4888 people are killed and about 59 million get affected annually from various types of disasters (World Disaster Report, 94).

In a country like India, majority of disaster-related problems are basically the unsolved development problems. Here, disaster prevention is not an aspect of development. Without solving the basic problems of population growth, housing, employment and environmental degradation, much talked about technical measures, like housing by laws regulations and land use planning are of no use. The various problems regarding disaster management cannot be solved in isolation. These have to be linked with poverty alleviation, proper environmental management and overall development activities.

There is nothing like ready made solution for disaster management and even the models of one country can not solve the problems of another country. A number

of developed countries are suffering from severe disasters. But the losses are minimum. The countries like USA and Japan are at the top in the effective disaster management approach list. These countries adopted a long-term planning to combat the adverse impacts of disasters. These countries developed a well drawn programme to undertake research studies in the areas related to Disaster Management. Based on the outcome of research and the lessons learnt from the past events, these countries were able to formulate the policy related to education in their respective countries. A number of developed countries are still following the long-term policy to combat the disaster situation.

In the developing countries like India, Disaster Management activities are just at the beginning stage. There is a need for evolving a strategy to mitigate the impact of disasters by initiating the preparedness measures through education and training. The disaster mitigation measures include a wide range of social, physical and financial issues which are addressed in the beginning of sustained national development strategy.

The declaration of 1990s as the International Decade for Natural Disaster Reduction (IDNDR) by United Nations General Assembly was very timely. The objective of the decade is to reduce through concerted international cooperation and efforts the damage to property and social and economic disruption caused by natural disasters. The goals of the decade are:

- “(i) To improve the capacity of each country to mitigate the effects of Natural Disasters expeditiously and effectively, paying special attention to assisting developing countries in the assessment of disaster damage potential and in the establishment of early warning systems and disaster resistant structures when needed;
- “(ii) To devise appropriate guidelines and strategies for applying existing scientific and technical knowledge taking into account the cultural and economic diversity among nations.
- “(iii) To foster scientific and engineering endeavors aimed at closing critical gaps in knowledge in order to reduce loss of life and property.
- “(iv) To disseminate existing and new technical information related measures for the assessment, prediction and mitigation of natural disasters; and
- “(v) To develop measures for the assessment, prevention and mitigation of natural disasters through programs of technical assistance and technology transfer, demonstration, and education and training tailored to specific disaster and locations, and to evaluate the effectiveness of those programmes.”

The IDNDR has requested the government, NGOs, research education institutions to pay more attention to evolving effective ways for mitigating disasters. At present, in the country, there is a high demand for the institutions of higher learning to develop and launch such programmes, which, besides training the functionaries of

Government agencies and NGOs, could generate necessary awareness among the masses. Such education programmes may take the following forms.

### **I. Public Education**

Education represents formal, non-formal and informal approaches to learning for developing the knowledge base, aiming to help a person in:

- Understanding the intended subject
- forming independent opinion
- establishing priorities and
- knowing relevant methodologies

This is a long-term programme under which standard curricula for school/college/university students should be drawn. The curricula should include the necessary information to counter the disaster threat.

### **II. Training Programmes**

Training involves a set of learning activities oriented to objectives of improving knowledge, skills and attitude of individuals to carry out specific tasks based on accepted methodology with appropriate techniques. Thus, it may include the short-term training programmes and exchange of knowledge through seminars, conferences, expert group meetings, etc.

Special training workshops may be designed for an adult population, either to be organised specially, or as an extra dimension of on-going programmes like, adult education.

### **III. Extension Programmes**

Community or village based outreach worker can be trained to provide relevant information. For the purpose of public information, radio, television and printed media with well designed and projected messages can be of great help.

Usually training and education programmes tend to concentrate mainly on the various aspects of preparedness, response and recovery. The concept of Disaster Management Cycle helps in understanding the important and vital relationship between the various stages of disaster management. The process of training and education for living and working in disaster-prone areas requires a continuous improvement and knowledge transfer between the various stake holders, like researchers, community leaders and volunteers. Training and education programmes in the area of Disaster Management are multidisciplinary and should have the following:

- Education and training programme in disaster management/mitigation must be an integral part of development planning.
- oriented towards the most vulnerable sections of the community.
- institutionalised as on going process.
- based upon the outcome of training-need analysis

- specific for subject matter and target groups in local languages.
- Participating in nature ensuring active community participation.

As stated earlier, any education and training programmes must be based on the Training Need Analysis and must correlate with the specific problems of a particular region or community. Disaster Management training programmes should have the following basic requirements.

- \* Public information and awareness including the overview of potential hazards in a particular region or locality.
- \* Vulnerability analysis and risk features involved for various hazards.
- \* Prediction and warning systems available and the proper utilisation for the appropriate safeguard against the potential hazard.
- \* Post-disaster relief and recovery mechanism.
- \* Emergency management including do's and don'ts during the disaster situations.
- \* Long-term recovery plans and role identification for various actors.

An important aspect of Disaster Management education and training is the target group programme. The various target groups may include.

**I. Policy Makers**

- \* Central Governmental/State Government officials.
- \* Other senior level administrators.

**II. Professionals**

- \* Engineers/Architects
- \* Physical Planners
- \* Trainers/Researchers

**III. Voluntary Groups**

- \* NGO representatives working in the field of Disaster Management.
- \* Various religious organisations involved in Disaster Management NCC/ NSS representatives.
- \* Individual volunteers actively involved in social work and interested in Disaster Management activities.
- \* Representatives form various clubs, and social organisations.

**IV. Community Groups**

- \* Community leaders including the religious heads
- \* School teachers and student community
- \* General masses.

Considering the status of various target groups, the education and training programmes must suit their level of understanding and requirements.

In India, the various education and training programmes can be grouped into two major streams i.e. the formal education system in colleges and universities and the non-formal short-term training programmes. The major contributions from the formal education system can be expected to be made in the following three areas :

**I. Research**

The institutes of higher learning are involved in conducting research in traditional sciences and social sciences, which should include the area of Disaster Management. The research findings may firm the basis for formulating policy and may also open certain commercial ventures.

**II. Technical Advises**

Senior faculty members of reputed universities/colleges are being consulted by various government, non-government, public and private organisations for their expertise in the areas related to Disaster Management. We need a concerted effort to use this vast human resource potential for conducting research and socio-economic analysis on disaster events.

**III. Knowledge Transfer**

Course work in the subjects related to Disaster Management can shape the careers and minds of young professionals and also can accelerate their enthusiasm for working in the field of Disaster Management.

In our country, a number of academic institutions are conducting programmes in areas related to Disaster Management. The University of Roorkee is having post-graduate courses in earthquake engineering, since the Sixties. Other institutes working in the areas of earthquake related studies are: IITs at Delhi, Kanpur and Mumbai, Anna University in Chennai and colleges like the Delhi College of Engineering and Madan Mohan Malviya Engineering College. A good amount of work is being done or has done on floods and drought in the Universities of Calcutta, Patna, Mysore, Madras, Utkal, Andhra Pradesh, etc. Research on landslides and related areas is being conducted at the Universities of Himachal Pradesh, Delhi and the Jawaharlal Nehru University.

Besides the traditional universities, a number of research institutes like CBRI, CRRI, SERCs, the Wadia Institute of Himalayan Geology, are engaged in educational programmes in the areas of Disaster Management. IGNOU has also started a course on Disaster Management through correspondence.

Under the category of non-formal short-term training programmes, the Government of India has taken the initiative of setting up the National Centre or Disaster Management (NCDM) at the Indian Institute of Public Administration (IIPA) and Disaster Management cells in all the States. At the moment about thirteen States have already started Disaster Management Cells in their respective public administration institutions. Other organisations involved in short-term Disaster Management training are the Administrative Staff College, and the CWC, Delhi.

There is a major change in the Government policy towards pre-disaster preparedness/mitigation from the post-disaster relief operations. The Ministry of Agriculture Government of India, the nodal ministry for Natural Disaster Management (NDM) in the country, has established the NCDM at IIPA. The NCDM, besides gearing up the national, State and district level administration to tackle natural

calamity, also coordinates various research and training programmes, and is building up a data-base on different aspects related to Natural Disaster Management.

The NCDM conducts research in the areas of disaster preparedness/mitigation, disaster economics, behavioural aspects of disaster affected people, and other relevant documents.

The NCDM is organising short-term training programmes and trainers training programmes on flood, drought, earthquake, etc. Besides, training, workshops, seminars on various themes related to Disaster Management are also conducted at IIPA.

The Centre is having a good network with other organisations working in the related areas in the country and abroad. The NCDM is also helping the various States in running their Disaster Management Centres (DMCs).

The training and education programmes aim at generating awareness/updating knowledge and skills of persons at various levels. These programmes will not be very efficient and effective unless, those who participate in these activities take very active interest in the related activities like real and hand-on experience of disaster situation. Arrangements should be made to involve the persons who are active in disaster management related activities, failing which, the spirit of the programmes will not gather momentum.

**N. Vinod Chandra Menon**

## **Role of NGOs in Disaster Management**

Voluntary Organisations have played a very significant role in the developing countries to effectively intervene to improve the socio-economic conditions of the people through strategic interventions. They have contributed immensely in strengthening the income-generation and employment generation possibilities in specific locations so that these will help to integrate the people below poverty line to the mainstream social fabric. In several sectors of society, the voluntary organisations have played a pioneering role so that these successful case studies can be documented as best practices replicated wherever possible. The phenomenal success of the voluntary organisations in improving the living conditions of the communities have prompted the international donor agencies to stipulate community participation and the involvement of voluntary organisations in the implementation of donor-assisted programmes as compulsory conditionalities in recent times.

The Comilla experience of the 1950s and 1960s has been hailed as a phenomenal success story, though the successful strategies of the voluntary initiatives of the Grameen Bank in extending micro credit for self help groups and micro enterprises in Bangla Desh, the Bangla Desh Rural Advancement Committee in spreading the message of primary education for all, the Sarvodaya Shramadana Sanghatana of Sri Lanka in integrated rural development, the Aga Khan Rural Support Program in several countries in integrated rural development, Self Employed Women's Association (SEWA) in improving the livelihood conditions of women in Gujarat, the Bharatiya Agro Industries Foundation (BAIF) in several states of India in integrated rural development etc. are recent illustrations.

Voluntary organisations have been effectively supporting local communities for improved health and family planning, water supply and sanitation, overall human development and improvement in living conditions and socio-economic conditions, improved social and tribal welfare, improved education, development of women and children, rehabilitation of handicapped, etc. In all realms, we find voluntary activists performing their tasks, often with dedication and commitment.

### **The Role of NGOs in Disaster Management**

Disaster Management has emerged as a specialised discipline only in the recent past even though the governments, voluntary organisations and local communities have been responding to disasters for a very long time. However, the shift in emphasis of the NGOs from the non-traditional strategies of support like micro credit for

the weaker sections, medicare, non-formal education and spread of literacy, etc., to more specialised areas like rescue and relief construction of transit and temporary shelters, rehabilitation of disaster victims, counselling and trauma care, participatory training and sensitisation campaigns etc., have offered tremendous opportunities for collaborative work through the active involvement of the government, corporate sector, donor agencies, local communities and voluntary agencies.

The following table lists the countries with highest prevalence of disasters during the period 1960 to 1989 as indicated by a study of the Asian Institute of Technology, Bangkok.

**Table I. Countries with Highest Prevalence of Disasters**

| <i>Country</i> | <i>1960-1969</i> | <i>1970-1979</i> | <i>1980-1989</i> |
|----------------|------------------|------------------|------------------|
| Bangla Desh    | 18               | 37               | 77               |
| India          | 34               | 102              | 172              |
| Indonesia      | 20               | 46               | 88               |
| Myanmar        | 10               | 10               | 24               |
| Nepal          | 7                | 8                | 19               |
| Sri Lanka      | 5                | 8                | 25               |
| Thailand       | 4                | 5                | 25               |

A documentation of best practices of NGO initiatives in disaster management will be a good beginning to study the experiences of NGOs in different cultural contexts as they responded to disaster situations. Some of the good illustrations of NGO initiatives in disaster management are the following.

- \* PRACA (Programa de Recuperacion Agropecuaria Campesina) designed and implemented by a group of Bolivian NGOs after the Bolivian drought of 1983. This program covered 1200 communities of over 50,000 households.
- \* PREDES's (Disaster Prevention and Research Centre) community-based disaster mitigation efforts in 1983 in the Rimac Valley, east of Lima, prone to repeated floods, landslides and earthquakes.
- \* The work of FUNDASAL (Fundacion Salvadorena de Desarollo Vivienda Minima) after the El Salvador earthquake in 1986, which covered 115,000 people in 85 communities immediately after the earthquake.

### **Rescue and Relief**

Several voluntary organisations reach the site of disaster immediately after the occurrence of the disaster event. Normally in situations where there are serious casualties, it is always useful to have medical professionals in the team which rushes

in for rescue and relief operations on hearing about a disaster. The team must also be exposed to the administering of first aid, counselling and trauma care, as these needs also have to be addressed by the personnel who intervene immediately after a disaster.

### **NGOs as an Interface**

In disaster situations, NGOs have to play a role as an interface with Donor Agencies, International Organisations, Government and Technocrats. The NGOs must develop the credibility to handle such situations and also effectively interact with various interest groups to ensure that the community interests are upheld.

### **Capacity Building of Neighbourhood Groups and Communities**

Voluntary Organisations can significantly contribute to strengthening the capability of neighbourhood groups and local communities to respond to disasters more effectively through awareness campaigns, participatory capacity building exercises, training programmes, media campaigns, etc. Initially, the voluntary organisation has to carry out an exercise in identification of community needs through a participatory and consultative process. In this exercise, it is imperative to persuade even the weaker sections to articulate their needs and evolve institutional mechanisms which can dovetail the government development schemes to meet these requirements.

As Bhandari observes in Korten and Alfonso, (1981), the three possible options in the choice making process are the Technocratic Approach, the People's Choice Approach and the Professional Approach. It is imperative that the approach has to be chosen on the basis of the contextual characteristics. Successful interventions have always tried to incorporate people's choices as they have evolved their coping strategies to several challenges facing their routine existence in adverse circumstances.

### **Professionalism in NGOs**

One of the challenges before the voluntary organisations is to improve the professionalism in their organisational cultures. The complex situations in which they operate demand that they are contemporaneous, that they update their understanding of issues in their areas of specialisation, that they identify their core competencies and specialise in niche and frontier areas and that they document the processes involved in the design of their successful action plans. Professionalism also relates to the exposure to various alternatives, modern management tool kits like Critical Path Method (CPM), Project Evaluation and Review Techniques (PERT), and participatory decision making and analysis tools like Participatory Rural Appraisal (PRA) and Rapid Rural Appraisal (RRA).

### **Conflict Management**

NGOs have to play a very active role in the management of conflicts in situations of disaster. The conflicts arise due to the complexities of the situations and the perception of the problem each interest group will have and the ideal solution. The NGOs will have to interact with the local government machinery and provide them support and guidance. A very effective role of the NGOs in such situation is to interact with local communities and perceive their views and relate these perspectives to the government machinery. As far as possible, NGOs must stay away from media controversies and encourage responsible and responsive journalism in situations of post-disaster rescue and relief, transit rehabilitation and socio-economic rehabilitation.

### **Research Agenda: Risk Assessment and Vulnerability Analysis**

The voluntary organisations must understand their territory and jurisdictions well enough to interact with the communities, government functionaries, non-officials, donor agencies and other international agencies. For this, they must address the following questions.

- What are the potential hazards facing the community ?
- What has been the past trends of disaster occurrence ?
- What have been the coping strategies of the people ?
- Which sections of the people are more vulnerable ?
- What is the vulnerability of the physical, economic and social infrastructure ?
- What are the risks, options and priorities in action plans ?

The NGOs are seen to be successful and effective when they intervene in situations of disaster with a dedicated leadership which leads by example. This inspires confidence in the volunteers and also among the victims of disaster. It is imperative that these role models of dedicated leaders of NGOs during disasters are identified and documented, so that other organisations can benefit from such experience. We shall be able to identify such dedicated role models from the Bhopal gas tragedy, Latur earthquake, Andhra cyclone, Uttarkashi earthquake, Jabalpur earthquake, and the recent Gujarat cyclone.

### **Strengthening the Capacity Building Initiatives**

It is essential that the NGOs and local communities recognize that more effective disaster preparedness can reduce the damage to property and loss of lives when disasters occur. It is necessary that wherever the NGOs are active, risk assessment and vulnerability analysis is carried out with the involvement of professionals and technocrats and the support of disaster management specialists. Capacity building efforts can be through sensitisation, awareness campaigns, training programmes, dissemination of information, printing and distribution of brochures and posters in regional languages, etc. Apart from the print media, radio and television can be used to disseminate these messages. It is also found to be effective if street theatre and

folk art forms, etc. are also used in the awareness campaigns.

### **Capacity Building in the Communities**

It is necessary that the feeling of dependency which the people have on government and the sense of helplessness and expectations of external support to meet local needs is replaced by a strong sense of confidence, self-dignity and self-respect among local communities. This is possible only by conscious efforts of voluntary activists. For real development, the "beneficiaries" must be replaced by "empowered stakeholders" who are able to assert their self-respect and dignity rather than being treated like objects destined to stay in misery, starvation, illiteracy and abject poverty. The collective will of the people can radically transform their sustainable livelihoods, as has been illustrated by the success of the Grameen Bank which was started in 1976 as a pilot project and has gone a long way to attract over a million shareholders. Similarly, BRAC in Bangla Desh has successfully reached 12 million rural households for 'primary education for all' in 14,000 villages organising 700,000 of the poorest people in 13,000 community organisations.

### **Poverty Alleviation and Employment Generation**

The high population growth, environmental degradation and pressure on land and natural resources has resulted in serious adverse effect on the ecosystem. Natural resource management interventions and the revival of common property resources and pasture lands have to be actively pursued in the interests of sustainable development. All NGO initiatives must address the poverty and unemployment of the people and therefore aim at improving their socio-economic conditions by offering sustainable livelihood solutions.

### **Coping Strategies and Best Practices**

It is necessary to document and disseminate the coping strategies and best practices among village communities for the benefit of the rest of the world. It has been observed that the coping strategies and best practices followed by vulnerable communities have great relevance in similar situations elsewhere. This will also be useful to development practioners and voluntary activists for better informed interventions in their routine interactions with their clientele.

### **Training, Reskilling and Skills Updation**

The NGOs must constantly participate in training programmes and improve the attitudes, skills and knowledge on a wide variety of subjects which they will be handling in integrated development. The NGOs must also network with other professionals, specialised agencies and interact with a wide variety of institutions and individuals in updating their exposure and also sharing their experiences and insights. The NGO activists who have been involved in disaster management situations can

contribute by training their own colleagues and sharing their experiences with other institutions.

### **Advocacy and Action Research**

The NGOs also must participate very actively in advocacy campaigns and in action research programmes which can facilitate the integration of the insights into their action plans. The large NGO network in USA, for instance, has evolved its own consortium which makes it a powerful advocacy arm influencing public policy. Similarly, Duryog Nivaran is a network of professional NGOs in the Asian region which is evolving in that direction.

### **Counselling and Trauma Care**

The NGOs can also play a very active role in counselling and trauma care of disaster victims. These being specialised tasks, the voluntary activists who perform these activities have necessarily to be those who have undergone professional training in these areas. It is essential that every NGO activist cultivate the sensitivity to relate to the trauma and anguish of disaster victims and also cultivate the skills and knowledge to handle such situations with extreme sensitivity and compassion.

### **Mitigation and Recovery**

Disaster mitigation is basically an empowerment strategy as it increases the self-reliance and capacity to cope with adversity of people in disaster-prone situations. A well-designed strategy can ensure that institutional mechanisms are integrated in such a way that the resources are deployed in an optimal and efficient manner to withstand the worst effects of the hazard to which the communities are vulnerable. According to Professor Ian Davis, the limitations of over-stretched public sectors and the increase in disaster risks due to urbanisation, deforestation and population growth pressures suggest that the community based approach towards disaster mitigation seems to be the most viable alternative (Davis, 1984) Further, he observes, "Many (mitigation) programmes treat the symptoms and not the cause. The symptoms may be unsafe buildings or vulnerable cropping patterns, but the causes may include all or some of the following : under-development and poverty, control of land by absentee landlords, corruption, lack of education risk reduction policies must rely on both technical measures and on political interventions." (Davis, *ibid*).

### **Conclusion**

It is evident that the potential for the involvement of NGOs in disaster management is enormous. In India, the challenge before the NGOs is to evolve symbiotic relationship and collaborative partnerships which are transparent and purposive. The efforts of the Natural Disaster Management Division in the Department of

Agriculture and Co-operation, Ministry of Agriculture, Government of India in identifying such meaningful partnerships will go a long way in more effective disaster management practices in India.

## **Selected Readings**

Davis, Ian : "A Critical Review of the Work Method and Findings of the Housing and Natural Hazards Group", International Karakoram Project. Cambridge University Press, 1984.

Walker, Peter : "World Disasters Report 1998", International Red Cross and Red Crescent Societies.

Carter, W. Nick : "Disaster Management : A Disaster Manager's Handbook". Asian Development Bank, 1992.

Kotten, David C and Felipe B Alphonso "Bureaucracy and the Poor: Closing the Gap", Asian Institute of Management, Manila, 1981.

J.L. Sachdeva

## **Role of Adult Education in Creating Awareness of Natural Disaster Management**

Literacy, awareness and functionality have been important components of the Adult Education programme; but, since independence, literacy education has received low priority and the components of awareness and functionality have not received as much attention as they deserve. This has resulted in reducing adult education by and large to a literacy programme. Adult education has a deeper meaning and significance and it has to be used in a wider perspective. The masses have to be made aware of the problems faced by them in their daily life. The National Adult Education Programme, launched in 1978 for the first time, gave equal importance to the three mutually overlapping and reinforcing components - literacy, functionality and awareness - and emphasised that learning, working and living must be so oriented as to grow together with each component reinforcing and strengthening the other. In spite of this, awareness at the implementation stage has been the weakest link among the three components. Awareness is a multi-dimensional concept as its realisation requires not only conceptual clarity but also special skills to initiate the process of bringing about awareness among the non-literates, neo-literates and the poor. The Kothari Review Committee (set up to review NAEP) also noted this deficiency and found that adult education functionaries lack clarity about the meaning and scope of awareness.

Most illiterates are not interested in mere literacy, which has to be linked with other programmes which effect their lives. Any scheme of adult education, to prove useful and purposeful, has to take note of the broad realities surrounding the community. Awareness can play an effective role in creating a supportive atmosphere for promoting and boosting literacy education.

In the awareness component, emphasis is being given at present to environment, small family norms, health education and women empowerment, etc. But the natural disasters which bring untold misery to the people and irreparable damage to property and environment have not so far been covered under the adult education programme. The devastating toll of natural disasters call for a serious rethinking and proper analysis. Despite the stark increase in loss of life and economic damage arising from natural disasters, we have not taken benefit from the lessons learnt in disaster management. This has been due to our inability to transmit hard earned experience to people affected by disasters.

The community should be made to understand all disaster related matters, including preparedness, prevention and mitigation. The adult education programme which aims at the weaker sections of society has to play a meaningful role in creating awareness of natural disaster management as the poor and downtrodden are worst affected by disasters. Community has its own mechanism of coping against natural disasters. Adult education programme should strengthen these coping mechanisms.

Although disasters have been a part of life, the need for preparedness, mitigation and management of disasters has been felt only recently. It requires education and training of the people, who live in disaster prone areas. Education is to be given to those who are directly effected by disasters. Adult education programme is in operation in 450 districts of the country and through it the poor and downtrodden can be reached if disaster management becomes a part and parcel of adult education programme.

Awareness of disaster management can be created through adult education in the following ways:

Under the Adult Education programme training is given to Key-Resource Persons (KRPs) and Master Trainers (MTs). They in turn provide training to volunteer instructors. The training covers literacy, awareness and functionality. But in training also, the two components of awareness and functionality are hardly covered. The quality of training in many places leaves much to be desired. The State Resource Centres of Adult and Non-Formal Education and other agencies engaged in training will have to provide the right type of training covering all the components. The need is specially to strengthen the awareness component in the training programme. Under awareness, natural disaster management (NDM) should become an important part as it touches the lives of most of the beneficiaries of the adult education programme.

Most of the volunteer instructors in the literacy programme are school students. They require comprehensive and meaningful training in natural disaster management so that they impart awareness to participants effectively. It would be better if field functionaries are provided special training and orientation in disaster management, which should help them to prepare simple aids and supplementary materials in NDM so that the teacher and the learner get involved in the teaching - learning process.

In addition to the volunteers, the services of resource persons in Disaster Management should also be provided at the implementation stage so that the

message is fully absorbed by the beneficiaries. It appears difficult to pass the message effectively, if the school children are of classes VII to IX. The Department of Agriculture and Cooperation, Ministry of Agriculture, and the State Governments should provide the needed support to achieve the desired objective. It should be done through dialogue, discussions, reading groups, charts, wall papers and other audio-visual aids.

The primers and post-literacy materials should include Natural Disaster Management as part of the curriculum, so that the lessons cover the message effectively. The materials should highlight about disasters which affect the particular area. There is a need to organise writers' workshops in which the writers should be oriented in Natural Disaster Management so that the message is meaningfully conveyed to the learners in the primers and booklets for neo-literates.

### **Celebration of IDNDR**

The second Wednesday in October is observed all over the world as the International Disaster Reduction Day to inform people how to prevent disasters or reduce their impact. The day should also be observed in the area in which adult education programme is being implemented. An exhibition should be organised highlighting the disasters which affect the area. Experts should also be invited to talk on disasters which the community may face. The community can thus be helped in the prevention and reduction of the impact of disasters.

The community should also be encouraged to form their own organisations which can take right decisions at the right time. They can also mobilise resources and disseminate information regarding disasters as and when received from the authorities and the mass media. Such organisations in some States have done exceptionally well at the time of disasters and the need is to multiply such organisations in every State.

Natural disaster management has to become a part and parcel of the adult education programme, if the masses are to be involved in natural disaster management. The Department of Education, Ministry of Human Resource Development, should provide guidelines to the Literacy Campaign districts to include NDM in literacy, post-literacy and continuing education programmes. Through adult education the message of disaster preparedness, prevention and mitigation could be effectively disseminated. It is through community involvement, the group action in NDM could be promoted. Adult educators have to play a meaningful role in the International Decade for Natural Disaster Reduction (IDNDR).

**BB Mohanty**

## **Role of Media in Disaster Management**

Where does fatality end and human will power step in? Myths, religions and philosophies have long sought to pierce the mystery of this shadowy line of demarcation which runs like Ariaden's thread through the labyrinth of human experience. Perhaps the most striking expression of this mystery is the confrontation between humankind and the natural elements. How otherwise can we explain why some people go on living at the foot of a volcano or in an earthquake-prone area, though they are fully aware that in doing so they risk their lives?

Experience has taught us to take three key steps : to assess the risks from natural hazards as far as possible so as to mitigate their most devastating effects, and to educate people about potential dangers and ways of coping with them. We must also train the most active members of the population and - perhaps most important of all - make decision makers aware of their responsibilities. If we want to get the most out of existing knowledge and skills, the whole of the population must be mobilised.

- Bahgat Elnadi and  
Adel Riffat,  
The UNESCO Courier, October 97.

What is a disaster? According to the World Health Organisation (WHO), a disaster is : "Any occurrence that causes damage, economic disruption, loss of human life and deterioration in health and the health services on a scale sufficient to warrant an extraordinary response from outside the affected community or area." Under this definition, a disaster occurs almost every day somewhere in the world. By its very definition it is clear that response to a disaster must involve all sectors of government and the whole community.

Disaster, whether natural or man-made, usually occurs suddenly and unexpectedly, disrupting normal life and infrastructure for social services, including health care systems. The importance of preventive planning for disaster management is undeniable.

Adel Riffat and Bahgat Elnadi of UNESCO say that humankind, until a few decades ago, "seemed to be particularly helpless in the face of earthquakes, cyclones and volcanic eruptions. It was impossible to predict when they would happen and what their effects would be, Human intellect and determination could only bow to divine caprice."

They further say : "But worse was to come. It became apparent that in some cases human activity could actually trigger disasters or aggravate their impact. It was discovered, for instance, that unwise and anarchic land use caused drought, and that deforestation could be linked to flooding. Then came new disasters that were not of natural origin, but were no less dramatic, such as the radioactive cloud that blew from Chernobyl, the greenhouse effect and the hole in the ozone layers."

### **The International Decade**

With effect from 1 January 1990, we are in the International Decade for Natural Disaster Reduction. On 22 December 1989, the United Nations General Assembly adopted a resolution proclaiming the International Decade for Natural Disaster Reduction from 1 January 1990 and designating the second Wednesday of October as the International Day for Natural Disaster Reduction to be observed every year during the Decade. According to B.S. Padmanabhan, "The decision to designate the 1990s as a decade in which international community would pay special attention to fostering international cooperation in the field of natural disaster reduction was taken by the U.N. General Assembly in December 1987. What prompted the U.N. General Assembly to adopt this resolution was the increasing number of natural calamities over the years in almost all parts of the

world affecting adversely the lives of thousands of people and causing considerable damage to infrastructure and poverty."

### **Decade Objective**

The objective of the Decade is to reduce, through concerted international action, particularly in the 3rd World countries, the loss of life, damage of property, and social and economic disruption caused by natural disasters, such as earthquakes, windstorms, floods, landslides, volcanic eruptions, wildfires, grasshopper and locust infestation, drought and desertification and other calamities of natural origin. In a statement made to the session of Special High-level Council of International Decade for Natural Disaster Reduction held in Geneva on 9 October 1991, the former Secretary-General of the United Nations, Mr. Perez De Cuellar had said : "The objective of the Decade is a simple, but critical one : To reduce the immense loss of human life and destruction of property caused by natural disasters. The importance of this is all too evident. In addition to human suffering, natural disasters arrest the process of economic development and often set it back many years. As we focus increasingly on strategies for sustainable development, we must take into account the vulnerability of so many countries to natural disasters . . . . While it may not be possible altogether to eliminate destruction caused by the forces of nature, it is possible to mitigate these losses substantially. For example, accurate monitoring of menacing volcanoes and timely evacuation of the exposed population have in some recent instances significantly reduced the destructive consequences of natural disasters. In other instances, we know that adequate shelters and more attention to warnings would have made the difference between life and death. . . . I wish to reaffirm our common conviction that hundreds of million of people can be protected from tragedy, and other major setbacks to economic development can be avoided, through a world-wide effort for disaster reduction."

### **Decade Goal**

The goal of the Decade are :

- " (a) To improve the capacity of each country to mitigate the effects of natural disasters expeditiously and effectively, paying special attention to assisting developing countries in the assessment of disaster damage potential and in the establishment of early warning systems and disaster-resistant structures when and where needed;

- " (b) To devise appropriate guidelines and strategies for applying existing scientific and technical knowledge, taking into account the cultural and economic diversity among nations;
- " (c) To foster scientific and engineering endeavours aimed at closing critical gaps in knowledge in order to reduce loss of life and property;
- " (d) To disseminate existing and new technical information related to measures for the assessment, prediction and mitigation of natural disasters;
- " (e) To develop measures for the assessment, prediction, prevention and mitigation of natural disasters through programme of technical assistance and technology transfer, demonstration projects, and education and training, tailored to specific disasters and locations, and to evaluate the effectiveness of those programmes."

### **Global Scenario**

The Swedish Red Cross publication "Prevention Better than Cure" gives the global scenario on Disasters. Over the last ten years, major natural disasters have caused economic losses amounting to more than US \$ 400 billion and insured losses of some US \$ 100 billion. Compared with disaster losses in the 1960s, the economic loss burden has increased eight-fold, discounting inflation, and insured losses by as much as fifteen-fold. As Gerhard Berz put it: "Individual disasters like Hworicane Andrew (USA, 1992) have cost as much as US \$ 30 billion in economic damages, two thirds of which was borne by the insurance industry. Where there was only one insured disaster loss exceeding US \$ 1 billion before 1987, eighteen such disasters have occurred since then."

B.S Padmanabhan gives a graphic description of the Krakatoa volcanic eruption in Indonesia (1883), which was regarded as one of the greatest in history and was the first to be widely observed and recorded. He says: "It was estimated that 26 times the energy of a hydrogen bomb was released. The ash cloud, propelled by winds was 80 kilometres high and covered the earth in a ring thousands of kilometres in width. The explosions were so loud that they were heard 4800 kilometres away. Tsunamis, as high as 36 metres, swept over 250 coastal towns drowning over 35,000 people. More recently, there had been a devastating eruption of volcano in Philippines, earthquake in Indonesia and cyclone in Tamil Nadu (India). Hardly a day passes without one part of the world or the other being hit by a natural calamity."

Disaster statistics reveal that earthquakes had taken a toll of 53,000 lives in the 1960s and 150,000 lives in the 1970s. The tropical cyclone resulted in the death of 108,000 thousand in the 1960s and over 150,000 in the 1970s. In the 1960s, 24,000 people were killed due to floods and twice as many in the 1970s.

Since the beginning of the current century, 593 disaster events have occurred in the Eastern Mediterranean, 879 in Europe, 1205 in South-East Asia, 1346 in Western Pacific, 1592 in Africa and 1871 in the Americas. According to Bindi V. Shah of the London School of Economics, the death toll was the highest in less developed, low income countries. He has said: "World population pressure and hunger for land is forcing more people to inhabit the earth's hazardous zones. It is not major changes in the earth's climate and structure that has led to an increase in disasters, but the concentration of social and economic activity in disaster-prone areas."

### **Regional Scenario**

As has been seen in the foregoing analysis of the global scenario, Americas top with 1871 disaster events, followed by Africa with 1592 events and the Western Pacific with 1346 events. South-East Asia had 1205 disaster events over the past nine decades. Flood accounts for the largest number of events followed by cyclones in this region.

It pains me to write that during July this year the coastal towns of Wewak and Aitape in Papua New Guinea were devastated due to Tsunami, and although the media, did not report anything about Jayapura in the province of Irian Jaya, Indonesia, which is only a few kilometres away on the same coast, and where I had lived for about four years during 1970 and 1973, I am sure that this beautiful capital of Irian Jaya was equally affected like Wewak and Aitape.

In South-East Asia, India had the largest number of disaster events, followed by Indonesia and Bangladesh. However, Bangladesh tops the list in terms of number of people killed, partly because of its high population density in disaster-prone areas and all types of disasters do not have the same impact. Drought and floods affect far more people than tropical cyclones or earthquakes which tend to kill more.

### **Indian Scenario**

India is most prone to disasters, because, to a considerable extent, its

topographic conditions lend themselves to increasing the vulnerability of the country to natural disasters of different types, such as flood, drought, cyclone, earthquake and volcanic activity, which is rather rare. The damage resulting from floods is of the order of Rs.6000 million. Between 1953 and 1985, the total damage caused by flood is estimated to be more than Rs.200,000 million.

Floods and drought alternate in India, and sometimes they co-exist. Drought has been affecting one part of the country or the other round the year. The drought of 1901, 1918 and 1943 which hit Bengal, the drought of 1964 in Rajasthan, the one which affected the whole of north India in 1967 and the 1972 drought in Central India had been quite severe. Sixteen States were severely affected by drought in 1982 and 1983 and 15 States were hit in 1985-86. During the next two years 20 States were severely affected.

Cyclone is an annual feature in India. Its coast line of 5700 kilometres is exposed to tropical cyclones, which originate in the Bay of Bengal and Arabian Sea. Every year, on an average, three out of six tropical cyclones hit the coastal States of this region. Tropical cyclones have been responsible for enormous destruction and loss of life. In 1971, 10,000 people had died in Orissa due to a devastating cyclone. Andhra Pradesh, Tamil Nadu, Kerala and Laccadives were periodically affected by cyclones.

Earthquake is yet another natural disaster occurring in India. As many as 20 earthquakes have hit the country during the past 100 years. The earthquakes in Kutch in 1891, Assam in 1897, Kangra in 1905, Bihar-Nepal in 1934, Koyna in 1967, Bhadrachala in 1969, Broach in 1970, India-Nepal border in 1980, Silchar in 1984, Himachal Pradesh in 1986, Bihar and Sikkim in 1986, Uttar Kashi in 1991 and Latur of 1993 had been devastating in their impact.

Volcanic activity is a rare phenomenon in India, although there is a dormant volcano in an island in Bay of Bengal which had erupted in the year 1800.

Other types of disasters witnessed are tornadoes, epidemics, landslides and avalanches.

Man-made disasters have been an added cause for concern in recent years. These include industrial disasters, accidents in industrial complexes, road accidents due to growing traffic and careless driving and growing urban population. The Bhopal disaster which killed thousands of people by an accidental leakage of MIC from the Union Carbide plant has shown the problem of industrial disasters. Transport of hazardous materials has resulted in severe accidents recently, both on the roads of Thane and a godown in Delhi.

### **Impact of Disasters**

The immediate impact of any natural disaster is distinctly visible in death and displacement of human population, damage to property and crops, but the impact which is not so visible relates to the health condition of the population. There is a specific relationship between the type of disaster and its effects on health. As B.S. Padmanabhan says : "In general, the health impact of disasters is manifested in the unexpectedly large number of deaths, injuries or illnesses exceeding the coping capacities of the local health services and requiring external assistance. The local health infrastructures may get destroyed and the provision of routine health services and preventive activities may get disrupted. This, in turn, will lead to long-term health consequences in terms of increased morbidity and mortality. Some disasters may have adverse effect on environment and the population, increasing the risk of communicable diseases and environmental hazards. Disasters may also affect the psychological and social behaviour of the stricken community. Anxiety, neurosis and depression may follow disasters. Disasters may lead to food shortage and consequent nutritional problems. The displacement of large population may also increase the risk of outbreak of communicable diseases."

The toxic effect of industrial disasters give rise to congenital defects, cancers, liver diseases and cerebral palsy syndrome. The multiple aspects of famines result in severe under nutrition and death. The victims of starvation undergo untold devastating and psychological deterioration.

Disasters have also their impact on development. Health of the people is one of the basic elements of economic development. If the people are not healthy, the country's productivity suffers. Secondly, disasters cause extensive damage to crops, buildings, infrastructural facilities and other civic amenities and resources. According to a World Bank estimate, disasters cost 40 billion US Dollars in physical damage every year; and windstorms, floods and earthquakes alone cost 18.8 million dollars per day on an average. According to one estimate, the losses

to Gross National Product (GNP) due to disasters can be twenty times greater for developing countries than for developed nations.

It is hard to assess the broader economic implications of disasters. It is difficult to quantify the long-term impact of the loss of skills due to death of technicians and craftsmen in an earthquake or flood. Bangladesh, in the 1970 cyclone lost 60 per cent of its fishermen.

### **Disaster Management Strategies**

Any strategy for disaster management has to be operated at three stages : the pre-disaster stage, disaster stage and post-disaster stage. The level of preparedness has to be strengthened and the capacity to mitigate the impact of disaster has to be increased during the stage of pre-disaster management. During disaster the management has to concentrate on emergency rescue and relief. Post-disaster management involves rehabilitation and reconstruction.

India has gained valuable experience in coping with natural disasters of various magnitudes, and in managing them the emphasis has been, till recently, on the emergency rescue and relief operations during the disaster phase, and to some extent on rehabilitation during the post-disaster phase. However, there has been a growing awareness on the need and importance of preparedness during the pre-disaster phase, which essentially includes forecasting and warning, education and training of the population and setting up of organisations for managing disaster situations. Information and communication are essential components of preparedness. Principles of preparedness also envisage building of physical infrastructure to mitigate the impact of disasters and organisation of responsible communities and agencies. Both these are extremely necessary as one becomes totally ineffective without the other.

In the context of the International Decade for Natural Disaster Reduction (IDNDR) a high level committee was constituted under the Chairmanship of the Agriculture Minister of the Government of India with the following objectives :

- (a) "identify and recommend programmes for natural disaster mitigation and give specific thrust to the disaster reduction components in the sectoral developmental programmes of the Five Year Plans;"
- (b) "review the existing arrangements for preparedness and mitigation of natural calamities and recommend measures for strengthening organisational management of natural disasters:"

- (c) "examine the impact of public policies on the prevention of natural disasters and suggest coordinated action; and
- (d) "formulate and recommend programmes for public awareness for building up society's resilience to natural disasters."

### **Information, Communication, Education (ICE)**

Communication relating to disaster preparedness should result in the behavioral change in the people and this happens only when inter-personal communication containing meaningful information, plays its role effectively. It is Education, not Communication, which should be the third element in the much talked about Information-Education-Communication (IEC) chain. In other words, the chain should be ICE and not IEC. Therefore, the entire range of communication media, both traditional and modern, should be utilised for disaster management in all the three stages so as to be in phase with the ICE model. This necessitates the suitable treatment of the messages to be formulated for the media. In short, suitable message design is an urgent and most important task requiring appropriate training for the media people. India should have a National Institute of Communication and Education for Disaster Management (NICEDM), which should have working relationship with other communication institutes and university departments of journalism and communication.

### **Media for Disaster Management**

Disaster management has certain communication tasks inherent in it. These are: awareness building through forecasting and warning, education and training during the pre-disaster stage; confidence building, adequate and meaningful information on relief measures being undertaken and networking of local groups and agencies in the disaster stage; and mobilisation of the people for rehabilitation and reconstruction activities during the post-disaster stage. In addition to these communication tasks, creation of awareness on the importance of pre-disaster preparedness has assumed considerable importance of late.

The above communication tasks can be performed by the different media under the broad philosophy and methodology of the ICE model. With timely and appropriate communication directed at the different target audiences, it is possible to predict problems so that suitable action can be taken before they turn out to be emergencies. Drought and famine do not happen overnight. Epidemics often start with a single case and then spread across the different areas of a country in a predictable fashion. For a country like India, which depends on its river

system to a considerable extent, even floods can be foretold at least a few days in advance. This is necessary to keep the policy makers, political leaders and bureaucracy well informed so that appropriate advance action leading to disaster preparedness can be taken in time.

The different media of communication can fit in to the tasks involved so that the effort and impact of one support and reinforce those of the other.

The print media like the national newspapers, local newspapers published from State capitals and other major towns in the State and newspapers published from districts and sub-divisions, however limited their reach may be due to the literacy barrier, have a very important role to play in keeping those who matter and the citizens well informed about the disaster preparedness and other relevant issues relating to pre-disaster, disaster and post-disaster stages. Print media have a multiplier effect and they enjoy certain degree of credibility, no matter how and in what manner a news is treated and projected in the electronic media.

The electronic media, due to the technology inherent in them, can disseminate news about disasters almost instantly, if necessary with the audio-visual appeal. Radio is an excellent medium in terms of its access to the listeners and geographical coverage, but it has been the experience of mine that sometimes the type of language used in radio makes a simple thing difficult to be understood. Another important factor is the speed of delivery of news or any other announcement.

‘Television is an excellent medium to project an information with appropriate moving visuals, provided whatever has been said in case of radio is taken care of. With a huge and expanding network of television channels and cable television in India, communication and education on disaster management could be regular features, apart from conveying information relating to essential information on disaster preparedness, disaster management and post-disaster management.

Traditional tools and media of communication come in handy for disaster management. Beating of drums, indigenous communication networks in rural areas, village shops and market places, weekly markets, village fairs and festivals can be and should be used for disaster communication.

Interpersonal communication has a very important role to play in this area, because it is the people who are the senders and receivers of the information.

Rumour sometimes play havoc in emergency situations, because it is sustained by people who are ignorant of what happens when and why.

It too often is not reported that women and children usually suffer more than men in natural disasters, especially in the developing countries. Most of the 100,000 people who died in the Bangladesh cyclone of 1991 were women. Many died while trying to protect their children. Debarati Guha-Sapir says: "And yet women in traditional communities can play a key role in disaster preparedness and relief in areas they are used to handling, such as distribution of food, water, blankets and jerycans and the silting of lavatories. They take decisions about the welfare of children including their evacuation, feeding and safe keeping in chaotic times. Education and public information campaigns should take account of these social and cultural responsibilities. Information on where food and other supplies can be obtained and the claims to such relief should be spelled out for the general public but should keep women very much in mind. Illiteracy and other factors may limit a woman's access to such information."

India is yet to use fully the Amateur Radio, or ham, as it is popularly called, in disaster communication. As S.Suri says : "Largely unnoticed, hams daily carry out a useful function passing message to people isolated from normal communications services. They usually come into the public spotlight only after accidents and natural calamities. Last October, an earthquake struck Uttarkashi, killing several hundred people, cutting off roads. As soon as they heard the news, K. Venkata Murali and four other Hyderabad hams rushed to the area with portable radio gear to help. Together with several local hams, Murali and his friends relayed details of the quakes to all, and the nature and amount of relief needed to officials in Dehradun, Delhi and Uttarkashi." While there is so much of devotion and dedication displayed by the hams in emergency situations, there is not a systematic and organised way of using their services by the Government . Of course, there are exceptions. The director of the Hyderabad based Centre for Disaster Management works closely with hams. The Centre has tried to popularise amateur radio by establishing ham clubs in all coastal districts of Andhra Pradesh. In 1992 there were 6500 hams in India. The late Rajiv Gandhi was a very active ham. There is a National Institute of Amateur Radio in Hyderabad, which conducts regular courses for aspiring hams. The hams enjoy a kind of international fellowship among themselves. What a precious and useful communication resource network.

In the past, the tolling of bells was the usual way to warn people of impending disasters like floods, fires or approaching armies. The warning systems

today rely on measurement techniques drawn mostly from physics and geophysics, and from communications technology. It is possible today to speak to people anywhere on earth from a disaster site.

## References

1. "Disaster Preparedness" - Report and Documentation of the Technical Discussions, Forty-fourth Session of the WHO Regional Committee for South-East Asia, Maldives, 22-28 September 1991.
2. "Health Services in Disaster Management" Keynote Address by Dr. Olaivi Elo, WHO Representative to India, Media Orientation, Symposium on 'Natural Disaster Reduction', New Delhi, 15 January 1993.
3. Kurukshetra, December 1992, Publications Division, Government of India, New Delhi - Various articles on Fighting Natural Disasters.
4. "Disaster, Health and Development" - B.S. Padmanabhan, Media Orientation Symposium on Natural Disaster Reduction, New Delhi, 15 January 1993
5. The UNESCO Courier, Special Issue on 'Natural Disasters - Be Prepared!', October 1997. Unesco, Paris.
6. "Vocies That Span the Globe"- S. Suri and M. Sivanand, The Reader's Digest, September 1992.

## **Inaugural Address**

Human vulnerability to disasters, especially natural disasters, is an age-old phenomenon. Disasters occur where vulnerable people are overwhelmed by extreme events or hazards, either natural, human or a combination of both. Various types of disasters such as cyclones, floods, earthquakes, volcanic eruptions and droughts have time and again exposed the defenselessness of communities, economic & social structures and also undermined their ability to survive. The growth of development activities at the cost of environment has made most of the regions in the world susceptible to the fatal mix of forces of nature and human error.

The increase in the frequency and intensity of natural disasters have been alarming over the last decade and this unremittingly calls for a comprehensive strategy to lessen the effects of disasters by resorting to effective disaster management techniques related to preparedness, prevention, mitigation and response. Disaster management has over the period of time evolved into a methodical technique that focuses on systematic observation, analysis and dissemination of events in order to structure them by timely and informed application of resources. The objectives are to prevent avoidable loss of life and property, minimise human suffering, and expedite recovery and rehabilitation. Reaching out to the people in the remotest corners of the country should now be the most crucial goal of disaster management programmes.

The target groups of any disaster management strategy are the volunteers and social workers, functional specialists and the people at large. People are ultimately responsible for implementing predisaster schemes and action plans. It is in this context that the role of education and training in handling natural disasters assumes predominance. Disaster management education lays stress on understanding different types of natural hazards, disaster management techniques and impediments to disaster reduction. Education for disaster management aims at both education and management of disasters ultimately leading to disaster reduction. The entire approach is dependent upon people and consequently the Non-governmental Organisations (NGOs). These bodies are involved in community education, which fosters community solidarity, and self-reliance that could minimise social disruptions in the times of disaster. Assistance in educating the public to understand the benefits of long-term mitigation, especially in relation to national development and preservation of the environment should thus be regarded as a valid and productive objective of disaster management. The object should be to promote an informed and alert community capable of facing the aftermath of disasters and contributing towards suste-

nance of economic development and improvement of quality of life.

Disaster management becomes possible only through the application of contemporary knowledge about disaster reduction. Education has an important role to play in planning at both pre-disaster and post-disaster stages. The most relevant component of education is training. Disaster management covers a wide range of functions and skills which include planning, organising, day-to-day management activities, counter-disaster operations, crises management activities, recovery functions and specific tasks related to information and communication. Therefore, carefully structured and implemented training programmes are needed for development of competence and organisation of expertise.

Education and training are means of learning which continue throughout human life enabling the human beings to modify their behaviour fairly rapidly in more or less, permanent way as a result of new perceptions, concepts and other experiences. A distinction is often made between the role of education and the role of training in bringing about the required changes, while the former is supposed to focus on knowledge, concepts, understanding and analysis, the latter is required to pay more attention on improvement of knowledge, skills and attitudes in the trainees. In essence, both education and training overlap and are theoretically interdependent. Of late, technological innovations and specialisation have somewhat unjustifiably brought their distinct characteristics to the fore.

Training is an organised, planned and conscious effort to bring about a change in the knowledge, techniques and behaviour of the trainees through well-versed trainers, suitable training methods and tools. It tries to reduce the chasm between the existing performance and the desired ability and infuses in the trainees confidence about their conduct in order to reach an optimal level of efficiency and competence for meeting the present and future requirements of the tasks assigned. In the area of disaster management, training aims to improve performance and problem-solving capabilities of people under difficult situations. It makes the people conscious of the personal and collective stake that each individual has in preparedness and response to natural disasters. Training develops an understanding of the distinctive purpose and practice with which disasters should be approached. It imparts knowledge and skills to cope with disasters; it creates commitment and improves individual and collective performance in decision making under stressful conditions.

An effective training process emphasises active involvement and sharing as opposed to a passive "Sit still and listen" approach. It has to be recognised that there are useful links between disaster management and disaster management training, more so, in the changing context when a lot of premium is being laid on technical, specialised, skills and management training in relation to disaster preparedness. Disaster management, which earlier used to be a task of emergency agencies is becoming everyone's responsibility, there is a rise in public awareness on disasters and the concept of victim accountability has received new connotation. The concepts and

trends in disaster management are changing, the definition of the problem of disasters now concentrates on increasing types and frequency of risks, technical knowledge, identification of vulnerable areas, standardised techniques to combat disasters and proliferation of man-made hazards. We are witnessing a shift from post-disaster assistance to pre-disaster preparedness, from readiness to mitigation, from dependency to self-reliance, from individual aid to restoration of services and community support and from relief to rehabilitation. The entire ad-hoc approach to disaster management is gradually giving way to a specialised and professional outlook of looking at the ever-changing demands of the system and its training needs.

The training requirements of individual countries are likely to vary. These are conditioned by the size and geographical disposition of the country, the disaster threat, national policy towards disaster, the nature and availability of disaster related resources, the degree of dependence on international assistance and training capability. The objective of training also differs from each target group for each disaster type. At the time of formulation and implementation of training programmes, it is advisable to identify certain in-country factors, which affect training. Some of these could be the basis of organisation which applies to disaster management, the current status of disaster management, the degree to which the disaster management system is utilised in some or all of its various functions, the experience of disaster management staff and the facilities available to implement training programmes. Due emphasis needs to be laid on these germane and research-based issues.

India peculiar position on the globe and the resultant climate and geophysics have ordained that the country has to face many natural hazards, most of which turn into natural disasters. India has a dubious history of being hit by at least one major disaster every year. Training and education programmes have thus caught the notice of various government and non-government bodies to meet the gravity of situation. The administrative mechanism at the central, state and local levels is gearing up to take up activities related to public awareness and education besides overseeing disaster-related efforts. In the past, the government response to natural disasters has improved in terms of its effectiveness. Considerable stress is now being placed on research and development activities to highlight the culture of prevention in disaster management scenario. Different ministries depending on the type and level of research are coordinating the research activities. Notable universities working in this area are University of Roorkee, Indian Institutes of Technology and Anna University. The Ministry of Agriculture has also set up a National Centre for Disaster Management at the Indian Institute of Public Administration to look after training in disaster management. The Centre is engaged in strengthening and streamlining the national, state and district level administration in order to tackle natural disasters. It is even coordinating various research and training programmes for building a database on natural disasters.

The NGOs have also exhibited a ceaseless zeal in invoking community

involvement and participating in community awareness and disaster education programmes. The NGOs are the most effective alternative means of achieving an efficient communication link between the disaster management activities and the affected community. In certain areas, the communities themselves have been engaged in disaster management education and awareness activities. They have formed their own organisations such as Village Task Force in Andhra Pradesh. It is elected by the people themselves and during disasters serves as a nodal agency for mobilisation of resources and circulation of information.

Many institutions in the recent years have turned to alternative methods of training which do not rely on direct face to face contact between the trainees and the trainers. These open and distance learning institutions offer flexibility and autonomy to learners to decide what is learnt, where is it learned and at what pace the learning occurs. The Indira Gandhi National Open University through its widespread and well-established network around the country is all set to launch a Certificate Programme in Disaster Management. The Programme is the brain child of the Faculty of Public Administration, School of Social Sciences and aims to familiarise the learners with the nature and typology of disasters, essentials of disaster preparedness, relief measures, community awareness, role of different agencies in disaster management, reconstruction and rehabilitation in disaster affected areas, skills assessment among other relevant topics. The Programme targets NGOs, relief workers, social workers and also the fresh learners. Its objective is to not only apprise the learners with sufficient knowledge on disasters but also sharpen their skills to counter disaster threats and sensitise them to the dilemmas and problems of disaster management. Since the future of open learning entails concentration on increasing use of technology-based media, growing focus on learner support and involvement, enhanced integration of open learning with more traditional methods and collaborative projects, it becomes pertinent that more efforts are made by such institutes in the field of education and training in disaster management.

The School of Social Sciences, I.G.N.O.U. has been collaborating with the Yashwant Rao Academy of Development Administration on a Project on Community Awareness on Disaster Preparedness. There is a qualitative need to build the capability of the local communities for coping with natural disasters by increasing their self-confidence through recognition and preparation of their traditional knowledge, practices and values as per the developmental activities. The Project aims at promoting and strengthening human and institutional capacity building for coping with the natural disasters by way of disaster preparedness. The major objectives of the Programme are to create awareness of disasters, upgrade information and strengthen resilience and self-confidence of local communities.

There is also an earnest need to orient and re-orient public officials and the NGO functionaries charged with disaster management responsibilities to deal effectively with a wide range of policy, planning, organisational and operational meas-

ures related to disasters. In this regard, the School of Social Sciences, Indira Gandhi National Open University is working in Disaster and Development Awareness for Local Level Elected Representatives. To carry it out, the University will partner with organisations such as Ministry of Agriculture, Ministry of Rural Development, UN Agencies, Indian Institute of Public Administration, State Institutes involved in disaster management and other experts in the area. The project will target the panchayat functionaries in the country through state administration and training institutes. The feedback garnered from them will give ample information about the vulnerabilities and coping mechanism at the grass root level, which will be analysed by experts. It will form a viable input for government planners and administrators. The project will broadly cover areas such as nature of disasters, linkages between disaster and development, risk assessment and action planning for villages. The objectives of the project will be to enlist the support of local institutions, help the community to develop action plans and build a data bank at different levels of administration. Transfer of power to panchayats has become the basic part of the Constitution of India and the objective of national development can only be achieved through the development of the vast rural areas. This project has been mainly conceived to incorporate disaster management in development planning at the grass root level and will prove to be a pioneering and innovative endeavour in the field of education and training for disaster management.

Training in disaster management is needed more at the rural level. At present, the available training courses are mostly for administrators run by the government training institutes or by NGOs for the field staff. Workshops and Seminars are organised but very few are conducted in semi-urban and rural areas. There is a total lack of coordinated or targetted efforts in this field. Gaps in training are indeed very large and resources quite meagre. There is definitely a need for training courses, which cover all sections of society; training modules need to be oriented to target groups keeping in view their strengths and weaknesses. Training must be a continuous, comprehensible and systematic process, which takes into account the advantages of traditional wisdom to the fullest extent. As disaster preparedness is of prime importance in reducing the need for disaster relief, it should be considered an integral part of development policy and planning. The vulnerable communities may not have choice to exact safer locations and may lack proper means to protect themselves. Education and training programmes are the best way to help them improve their lot.

The media should play a constructive role in this regard. The three important functions of media related to dissemination of information, promotion of awareness and education have to be carried out in the right earnest. The aim should be to give due weightage to the need for specialised know-how in the area of disaster management and presentation of accurate and useful information in the event of disasters. I.G.N.O.U. will soon be bringing out a video programme on Disasters and Media, which will touch upon the congruent role of television, radio, satellite and newspa-

pers in the projection of disaster-prone regions before and after the disasters. Many other relevant subjects pertaining to disaster prevention and mitigation will also be covered through the audio-video component in order to make education informative.

The multidimensional approach to education and training should concentrate on varied training techniques and tools such as disaster case studies, videography, exhibitions, expos, workshops, community polytechniques, seminars, conferences and even a Natural Disaster Resource Directory. Training is often regarded as an expenditure by organisations that have the prime responsibility to make the people aware and informed. Unfortunately such attitudes have become extremely rigidified. It is generally averred that training and education have a minimal role in the development process, which should under no circumstances be overplayed. Endeavour therefore should be to highlight the advantages of training so that it is accepted as a lucrative investment in human resources.

All training and education programmes in the future should target the community. The individual whether singly or more likely in teams will have to be called upon to take more initiative, add value and contribute to the hitherto untouched areas. Learning is the essence of training and should emphasize on experience, action and reflection. There is a need to underline action-oriented training. The training programme should enhance the ability of the target group to use the skills and information imbibed for fulfilling specific tasks within a disaster management programme. The training programmes must highlight the steps to be taken to meet the special needs of the most vulnerable categories of people. The future efforts should bring into their purview training of trainers' courses, institutionalisation of training efforts, development of technical expertise and useful educational material.

The United Nations has declared the current decade from 1990 till 2000 as the International Decade for Natural Disaster Reduction. The objective is to reduce through concerted international action, especially in the developing countries, the loss of life, property damage and socio-economic disruption caused by natural disasters. The renewed focus on disaster preparedness, prevention and rehabilitation would certainly require well-coordinated training and education programmes that are information and awareness oriented. The exercise has to be conducted with sincerity as well as caution. It should be realised that disaster management is still not a well-defined discipline. Our knowledge in the field cuts across wide professional areas such as environmental sciences, management, engineering, agriculture, social sciences, public health etc. Each of these areas is endowed with immense knowledge and experience on the relevance of disaster reduction. Elements from these areas are all essential in disaster management training and must constitute a gainful synthesis that could be ripened. Samuel Johnson stated way back in the 17th Century that "knowledge is of two kinds, we know the subject ourselves or we know where we can find information upon it". Successfully formulated and executed training and education programmes can only invigorate the quote.

**B.S. Garg**

## **Presidential Address**

I have great pleasure in welcoming you all to the National Workshop on "Role of Education and Training in Natural Disaster Management" which has brought together Central and State Government officials, representatives of Non - Governmental Organisations, Universities and Educational Institutes.

The 1990-2000 is being observed as the International Decade for Natural Disaster Reduction (IDNDR). This Workshop is a part of our commitment to the cause of natural disaster reduction.

In recent times, people are more concerned about natural disasters like earthquakes, cyclones, floods, droughts, avalanches, tornado etc. How education and training can play a meaningful role in management of disasters will be the main issue before the workshop. The role of formal educational institutions and the non- formal education system in preparation, prevention and mitigation of disasters will be discussed during the workshop. The workshop aims to create greater awareness about disaster preparedness with development strategy.

India is the most populous country in the world, next only to China with a population of 97 crores. The country is facing unprecedented rate of urbanisation. The urban population is expected to be about one -third of the total population by the turn of this century. The rapid urbanisation has increased the risk exposure to large sectors of population in the event of occurrence of natural disasters. The density of population has considerably increased. The migrants and poor live on land prone to natural disasters. They live in self-built shelters unable to stand to strong winds, rains or tremors. They also do not know how to protect themselves from natural disasters. In recent Gujarat cyclone the worst affected were migrants from U.P. and Bihar. The education and training can contribute significantly in prevention and mitigation of natural disasters for the safety of millions of people who live in disaster prone areas.

Both formal and non-formal education institutions can play a key role in preparedness, mitigation and prevention of disasters. The universities and colleges can contribute in the regard by organising both credit and non-credit courses on disaster management. Some universities are doing good work in this field, but the need is to involve more universities particularly those which are functioning in disaster prone areas.

The universities can also undertake specific case studies of work done for disaster prevention in countries which are prone to frequent disasters. The information so collected should be widely disseminated to the masses.

There is a need to establish Research and Development Institutions to undertake studies, investigation and research to understand the various phenomena of occurrence of natural disasters so as to devise ways and means for prevention and mitigation of natural disasters.

The disaster management should also be covered in the schools curriculum. The children can learn at an early age to respect the environment and understand the consequences if the nature is destroyed. There is a need to prepare material on disaster management for school children in the light of experiences gained in India and other neighbouring countries. Their early vision will certainly bring change in the community and they will be in a better position to manage natural disasters.

The adult education institutions can also contribute a lot in creating awareness about natural disasters through its literacy, post - literacy, continuing education programme. The Natural Disaster Management should also be included in the primers for non-literates and in the booklets for neo-literates.

The adult educators should help in establishing a forum for exchange of information so that people in disaster prone areas are updated in disaster management. The exchange of information process should be a continued process so that people remain prepared to face any eventuality.

Once the adults are made aware about the natural disasters and their management, the participation of community will increase. The affected communities then will have to be provided extensive training in skills to face disasters and to take upon themselves the responsibility for preparation, prevention, mitigation and rehabilitation. They should not be entirely dependent on Government for mitigation and relief work.

In the natural disaster management, the Australian slogan seems to be most appropriate. 'Don't be scared, be prepared.' Education can play a meaningful role in building confidence in management of disasters.

## **Recommendations**

The National Workshop on “Role of Education and Training in Natural Disaster Management”, held at New Delhi on 11-12 August 1998 under the auspices of the Indian Adult Education Association with the financial support of the Government of India in the Ministry of Agriculture (Department of Agriculture & Cooperation);

Realising the devastating effects of the natural disasters which strike India every now and then;

Considering the importance of managing the natural disasters with all the complexities inherent in them;

Remembering that in every natural disaster, the most vulnerable elements are the poor, the destitutes, the women and the children in society;

Appreciating the efforts of the Government organisations, non-government organisations (NGOs) and international agencies in the International Decade for Natural Disaster Reduction (IDNDR);

Considering the valuable deliberations and discussions arising out of learned presentations in the various sessions;

Taking into accounts the reports of the two Groups which discussed the topics of “Role of NGOs in Disaster Management” and “Role of Education and Training for Disaster Management” respectively;

Recommends that:

1. Natural Disaster Management must form an integral part of formal, non-formal and adult education programmes.
2. Natural Disaster Management should be introduced as an activity based programme and not as a scholastic one.
3. Modules generated in disaster management may be used in the pre-service and in-service training programmes of the DIET.

4. At the college level it can be incorporated in the course content of the Diploma Course in Environment Education.
5. Existing agencies like the DAE, SRC, leading voluntary agencies and university departments may develop material related to disaster management.
6. The NGOs should work hand in hand with Government Departments in disaster preparedness, mitigation programme, relief and rehabilitation.
7. As the NGOs are very close to the community, they are in a better position in giving disaster information, training and education to prepare a well prepared community.
8. The NGOs can strengthen the most vulnerable groups of the society like women and children, by empowering them.
9. The NGOs can play a very important role in warning dissemination, by involving new means of communication.
10. The NGOs can be trained in specific skills like search and rescue, first aid, and in providing temporary rehabilitation.

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The Indian Adult Education Association founded in 1939, aims at improving the quality of life through education visualized as a continuous and lifelong process. It directs its efforts towards accelerating adult education as a process, a programme and a movement.

The Association co-ordinates the activities of various agencies--Governmental and voluntary, national and international--engaged in similar pursuits. It organises conferences and seminars and undertakes surveys and research projects; it endeavours to up-date and sharpen the awareness of its members by bringing to them from all over the world expert views on, and experiences in, adult education. In pursuit of the policy, the Association has instituted the Nehru Literacy Award and Tagore Literacy Award for Women's Literacy, for outstanding contribution to the promotion of adult education in the country. It has also instituted the Dr. Zakir Husain Memorial Lecture, which is delivered every year by an educationist of eminence.

The Association has brought out many publications on themes relating to adult education, including the Hindi editions of several UNESCO publications. It brings out the Indian Journal of Adult Education, Proudh Shiksha, Jago aur Jagao and IAEA Newsletter.

The Association acts as the Indian arm of the International Council for Adult Education, International Federation of Workers' Education Associations and the Asian-South Pacific Bureau of Adult Education. Its membership is open to all individuals and institutions who believe in the aims and objectives of the Association.

Its headquarters are located in the Shafiq Memorial at 17-B, Indraprastha Estate, New Delhi-110002.

*Indian Journal of*

# Adult Education

Adult Education in the Perspective of  
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Educational Innovation for  
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Education and Skills for  
Out-of-School Adolescents

Retention of Literacy Skills by  
Neo-Literates

Literacy Programme in Bangladesh



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## **OUR CONTRIBUTORS**

***B.S. Garg*** is Chancellor, Rajasthan Vidyapeeth, Udaipur and President, Indian Adult Education Association, New Delhi

***B.B. Mohanty*** is former Resident Director, Indian Institute of Mass Communication, Dhenkanal, Orissa and Vice-President, Indian Adult Education Association, New Delhi

***K.C. Choudhary*** is General Secretary, Indian Adult Education Association, New Delhi

***M.U. Alam*** is Project Officer, Centre for Adult & Continuing Education, University of North Bengal, Darjeeling, West Bengal

***Tushar Mukherjee*** is Senior Consultant, Ramakrishna Mission Lakasiksha Parishad, Narendrapur, West Bengal

***Mridula Seth*** is Member, Technical Support Unit, UNFPA, New Delhi

***A. Mahanta*** is from State Resource Centre, Guwahati and ***I. Dutta*** is from Omeo Kumar Das Institute of Social Change and Development, Guwahati, Assam

***Radhanath Rath*** is President, Bharat Gyan Vigyan Samiti, Bhubaneswar, Orissa

***R.S. Kumat*** is former President, Rajasthan Adult Education Association, Jhalana Institutional Area, Jaipur

***Nishat Farooq*** is Director, State Resource Centre, Jamia Millia Islamia, New Delhi

***Sunil Job K.A.*** is Lecturer, S.A.M. Training College, Poothotta, Ernakulam Dist., Kerala

## Editorial

The twenty-first century is advancing on us relentlessly. It is necessary to look into the future so as to identify the main aspects of education and human civilisation in the next millennium, the beginning of which is not simply an important red-letter day in the world calendar. It is much more than that. It enables us to understand the future with reference to our understanding of the past, so that our united actions are directed towards building a happier future for humanity. We are extremely fortunate that the privilege of participating in the remarkable event has been bestowed upon us by destiny, which has given us the responsibility for what the world will be like in the twenty-first century.

There is a need for fundamentalisation of education. The question is : What must be the basis for such a fundamentalisation? Evidently, the basics in science and those in education constitute the basis.

Education for the twenty-first century is going to be 'Education for all'. It must have ethics at the core of its meaning. It should have a creative and innovative character, and must be built on scientifically substantiated knowledge. Education in the next millennium should have many forms so that it satisfies the cultural and ethnic diversity of mankind. As C.M. de Talleyrand had spoken almost two centuries ago : "Education is, indeed, a special power, whose field of influence cannot be determined by anyone, and even national power is not in a position to set its limits : the sphere of its influence is enormous, endless....."

B.S. Garg

## **Adult Education in the Perspective of Learning Throughout Life\***

The concept of learning throughout life has been emphasised by thinkers, philosophers and scholars since ancient times. The acquisition of knowledge from cradle to the grave is an age-old concept expressed in different ways by scholars. Learning throughout life has also been stressed by various International Conferences, Commissions and Committees set up from time to time by UNESCO.

The Faure Commission report titled "Learning to be : The World of Education Today and Tomorrow" (1972) stressed the need for lifelong learning in the following words: "We propose lifelong education as the master concept for educational policies in the years to come for both developed and developing countries."

But in practice, learning throughout life has not been achieved because life has been divided in different stages, the period of childhood and youth is assumed to be the time for learning and the rest of life is meant for main pursuits of action when the skills and attitude learnt in the first phase are to be applied.

Education in India over the years has been developed as a remedial action, object being to fill up the gaps that might have been left in the preparatory stage of life.

The terminal concept of education is not adequate in the present social, economic and technological context. Today education does not give the stimulus that can last throughout one's life. Much of the information and knowledge gathered in terminal education gets dated. Replenishment of the earlier knowledge and seeking new information and knowledge is the need of the hour. A person will become completely obsolete if he/she does not keep himself/herself abreast in the era of information technology. There are people who gain from scientific and technological revolutions and get new and lucrative jobs. These who do not move with this revolution suffer from unemployment, underemployment, compulsory early retirement and social marginalisation. Therefore, it is important to provide opportunities for further education and training to those who have been

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\* *Presidential Address of the Conference*

affected or likely to be affected by the technological revolution. The Delor Commission Report (1996) states: "The continuing education is in large measure a response to an economic demand. It enables firms to acquire the greater skills needed to maintain employment and gain a competitive edge. At the same time it provides people with opportunities for updating their knowledge and improving their earning power."

Another factor which calls for learning throughout life is increase in life expectancy of people. The average expectation of life has gone from 23 years in the Thirties to over 60 in the Nineties. The ageing person today not only requires more wage-earning opportunities in order to keep going, but also seek opportunities to function more actively as a citizen and for creative expression as an individual. The adult educators should provide soil for cross fertilisation of theory and experience. The Fifth International Conference on Adult Education held in Hamburg (Germany) in 1997 has stressed the need for education of ageing population. It recommends: "Adult Education can make a difference by promoting a new vision of older adults as autonomous, responsible persons and a productive force in society."

The breakdown of tradition at a faster pace calls for opportunities for education to check the disharmony happening between older and younger generations. The older people do not try to improve their traditional outlook about the new generation and the younger people live in their own environment and do not adjust to the values of their elders. The result is lack of communication between the two generations. In education stretching from childhood to the end of one's life, the dynamism of changing values and worthwhileness of traditions could both be incorporated. Lifelong learning will provide opportunities to understand each other better.

With increase in longevity, old couples have to live by themselves over much longer periods that they did as young couples. They have to learn to adjust themselves to each other because as young couples their children provide common interest. Old people thus need education which would help them to live properly in each other's company.

For achieving the objective of learning throughout life, some changes in formal education are also needed. Education in schools and colleges has to be made sufficiently attractive so that the young people may feel like returning to it when they grow old. It should create an aptitude and sustain the desire for learning. If creativity is properly cultivated at schools and colleges, then the urge for self-learning would not cease. This would necessitate a major change in the

method of teaching and overhauling of teachers' attitudes in teacher training programmes.

Educational institutions will have to continue contacts with their alumni all throughout their life to advise them where necessary and to act as a point of reference for problems and information.

Work experience should form a part of formal education. It is more meaningful when it is related to work. This would bridge the artificial gulf between men of thought and men of action. Along with mass literacy, functional literacy, the skill development programmes are matters of great urgency. They will help in improving living standards and achieving prosperity. The skill development has been much emphasised in adult education, but has not been adequately covered so far. The need is to incorporate it meaningfully. Those already employed also require updating of professional capabilities. They require on-the-job training and orientation courses.

The mass literacy programme launched in the country has achieved good results at certain places. But its continuity has not been ensured. The follow-up programmes at many places have not started immediately after the literacy programme. In Kerala, it took two years to start the post-literacy programme. It has resulted relapse into illiteracy. No system of adult education will succeed and leave permanent results unless continuity is ensured.

The Continuing Education Centres (CECs) being established in India will provide opportunities not only to neo-literates to continue their education but will also provide opportunities to the community as a whole to involve itself in the learning process. But to achieve this, the CECs will need to be provided proper physical facilities and should not be starved of funds as happened with the Jan Shikshan Nilayams.

Liquidation of illiteracy should not be the responsibility of the Education Department alone. Departments of Agriculture, industrial organisations and others have to involve themselves in the eradication of illiteracy programme. For the education of adult men and women, different techniques not confining to the centre/class room approach have to be employed.

Informal education has a great role in making learning lifelong. Film, television and radio should not only make their programmes entertaining but also informative and educative. If the media take the responsibility seriously, the masses will get an opportunity to continue learning throughout life.

Adult education should be taken as a tool of human development and self reliance. To achieve this, public institutions, private companies, voluntary organisations, professional associations, and media, etc. have to share their experience and resources and can thus give new dimensions to achieve the objective of learning throughout life.

I conclude with the Hamburg Conference declaration, which says: "We are determined to ensure that life-long learning will become a more significant reality in the early twenty-first century. To that end, we commit ourselves to promote the culture of learning through the "one hour a day for learning" movement and the development of the United Nations Week of Adult Learning."

**B.B. Mohanty**

## **Adult Education in the Perspective of Learning Throughout Life\***

The Faure Commission's report titled "Learning to be -- The World of Education Today and Tomorrow" (1972) had recommended a 21-Point strategy for a global revolution in education. It had given emphasis to two fundamental concepts : lifelong education and learning society. In the words of the Commission: "Every individual must be in a position to keep learning throughout his life. The idea of lifelong education is the keystone of the learning society.

### **Society and Education**

There is a constant change of the nature of relationship between society and education. The learning society is a "social configuration which accorded such a place to education and conferred such a status on it." It is conceived as a process of close "interweaving between education and the social, political and economic fabric" which includes the family and society. As stated in 'Learning to be'. "It implies that every citizen should have the means of learning, training and cultivating himself freely available to him, under all circumstances, so that he will be in a fundamentally different position in relation to his own education."

In view of the above, education for tomorrow must be a coordinated totality in which all sectors of society are structurally integrated. Such education will be universalized and continual; and will be total and creative from the point of view of individualised people. Consequently it will be individualized and self directed. "It will be the bulwark and the driving force in culture, as well as in promoting professional activity. This movement is irresistible and irreversible. It is the cultural revolution of our time.

Is this a utopian vision?

May be, any organisation which aims at changing the basic conditions of man's fate necessarily contains an element, which is utopian. Every far-reaching vision may be accused of utopianism.

### **Aim of Education**

The fundamental aim of education is the physical, intellectual, emotional and ethical integration of the individual into a complete man. In another light, it can be

\* Working Paper for the Conference

said that one can see a collective aspect and an individual aspect in the aim of education. As P.B. Saint-Hilaire writes: "From the collectivity point of view, education is expected to turn the individual into a good citizen, i.e., into a person who has harmonious relations with the other members of the community, who is useful to the society and who fulfils with his obligations as a citizen. On the other hand, it may be expected that education will give the individual a strong and healthy body, help him in building up his character and attain self-mastery, and supply him with good opportunities of discovering and developing harmoniously his natural abilities." According to Swami Vivekananda, "Education is the manifestation of the perfection already in man. This pedagogic ideal is found throughout history all over the world. Education has always played an important role in preparing men and women for becoming active citizens. Here education, as a process, is inseparable from the process of human development.

Raja Roy Singh has identified some distinguishing characteristics of the process of education. The first one is that education is delivered through a variety of societal organisms and institutions, the school being one of them. The human needs always determine the learning needs and not the other way. "Secondly, matching the institutional variety is the variety of the means of expression. Education is not only by written word; the oral, the visual and the contemplative, expressed in folk literature, art, religious, communion have been powerful means of learning." The inner mechanism, inherent in the process of education, enables teaching and learning to go together. Aristotle calls it as a moral type of friendship.

"Education has the dual power to cultivate and to stifle creativity. Modern psychological research has recognised this complex task of education. Education develops the creative faculties, only when, as Froebel put it, children are treated as flowers growing in a garden, and are encouraged to develop inquisitive and open minds. As Tagore had said, "Growth is the movement of a whole towards a fuller wholeness. Living things possess this wholeness from the beginning ..... a child has its own perfection as a child."

### **Education and National Development**

There is a direct link between education and national development, and such a link is strengthened when the national system of education is properly organised, from both qualitative and quantitative point of view. As has been rightly emphasized in 'Education and National Development' (Report of the Education Commission, 1964-66), "The naive belief that all education is necessarily good, both for the individual or for society, and that it will necessarily lead to progress, can be as harmful, as it is misplaced. Quantitatively, education can be organised to promote social justice or to retard it. History shows numerous instances where small social groups and elites have used education as a prerogative of their role and as a tool for maintaining their hegemony and perpetuating the value upon which it has

rested. On the other hand, a social and cultural revolution has been brought about in a system where equality of educational opportunity is provided and education is deliberately used to develop more and more potential talent and to harness it to the solution of national problems. The same is even more true of the quality of education." Writing on the Tanzanian educational system, Julius Nyerere says: "It has to foster the social goals of living together, working together, for the common good. It has to prepare our young people to play a dynamic and constructive part in the development of a society in which all members share fairly in the good or bad fortune of the group, and in which progress is measured in terms of human well being, not prestige buildings, cars, or other such things, whether privately or publicly owned. Our education must therefore inculcate a sense of commitment to the total community and help the pupils to accept the values appropriate to our kind of future, not those appropriate to our colonial past. It must produce good farmers; it has also to prepare people for their responsibilities as free workers and citizens in a free and democratic society, albeit a largely rural society."

Let us tune ourselves to another voice from Africa. According to Kajubi, the school is to be related to community needs and society. He considers continuing education of parents to be essential for the meaningful education of boys and girls. He also pleads for developing non-school learning. As Dube put it: "The desirability of out of school learning through group activity and interest groups, clubs, skill centres, and free schools has been emphasized by others. While the school system must be reformed and made less expensive, it is essential to search for effective alternatives which would extend educational activities on a much wider scale." Similar sentiments were expressed by Mahatma Gandhi: "Whatever may be true of other countries, in India at any rate where more than eighty per cent of the population is agricultural and another ten per cent industrial, it is a crime to make education merely literacy and to unfit boys and girls for manual work in after-life." Gandhi's educational philosophy was "education for life", which was reflected in his "Nai Talim" or "Basic Education", based on sound educational principles and methodology. Another facet of his educational philosophy was intensive citizenship education. In Gandhi's "education for life" and Nyerere's "education for self-reliance", one finds many things in common and the main focus in both was education for all".

Education is a fundamental human right. Article 26 of the Universal Declaration of Human Rights, proclaimed by the United Nations General Assembly in 1948, states in its opening paragraph that "everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit." Therefore, "education for all" is not an empty rhetoric, but an urgent need.

**Adult Education**

UNESCO Recommendation on the development of adult education adopted by the nineteenth session of its General Conference held at Nairobi on 26 November, 1976 sets out the vital role of adult education "as forming part of life-long education and learning." In the above recommendation, the term 'adult education' "denotes the entire body of organised educational process, whatever the content level and method, whether formal or otherwise, whether they prolong or replace initial education in schools, colleges and universities as well as in apprenticeship, whereby persons regarded as adult by the society to which they belong develop their abilities, enrich their knowledge, improve their technical and professional qualifications or turn them in a new direction and bring about changes in their attitudes or behaviour in the two fold perspective of full personal development and participation in balanced and independent social, economic and cultural development.

"adult education, however, must not be considered as an entity in itself, it is a sub-division, and an integral part of, a global scheme for lifelong education and training.

"the term, 'lifelong education and learning,' for its part, denotes an overall scheme aimed both at restructuring the existing education system and at developing the entire education outside the education system;

"in such a scheme men and women are the agents of their own education, through continual interactions between their thoughts and actions;

"education and learning, far from being limited to the period of attendance at school, should extend throughout life, include all skills and branches of knowledge, use all possible means, and give the opportunity to all people for full development of the personality;

"the educational and learning processes in which children, young people and adults of all ages are involved in the course of their lives, in whatever form, should be considered as a whole."

**Key to the 21st Century**

The fifth International Conference on Adult Education (CONFINTEA), held in Hamburg in July 1997, under the auspices of UNESCO and its partners, discussed adult education and learning as the key to the 21st Century, around five objectives:

1. To acknowledge the critical importance of adult learning;
2. To forge worldwide commitments to the right to learn of adults;
3. To exchange experience on present provision and needed developments;
4. To recommend future policy and priorities and adopt a Declaration on Adult learning and an Agenda for the Future;
5. To promote international cooperation;

Mare-Laurent Hazoume, writing on "Adult Learning and the Challenges of the 21st Century, says: "Education for all, as UNESCO has emphasised, is an indispensable prerequisite for fulfilling all the other preconditions for a culture of peace. But for such sharing, and the necessary equity in education to be established, other conditions have to be met, among them the effective resolution of the language question yet again. The right to education also means, in fact, the development of languages, which must in due course lead to the gradual creation of a literate environment, which is the path to eradicate illiteracy. Mastery of knowledge in all fields will not otherwise be achieved."

The International Commission on Education for the 21st Century, whose Chairman was Jacques Delors, in its report to UNESCO (popularly known as Delors Report, 1996), observes: "The concept of learning throughout life thus emerges as one of the keys to the 21st Century". The Commission has put greater emphasis on the four pillars that it proposes and describes as the foundations of education: Learning to live together, Learning to know, Learning to do, and Learning to be. All the above four pillars were contained in the Gandhian system of education, conceived and developed in 1939, by Mahatma Gandhi as Nai Talim or Basic Education. The Education Commission, in its report titled "Education and National Development" (1964-66), headed by Dr. D.S. Kothari, observed: "It was a revolt against the sterile, book-centred examination oriented system of education that had developed along traditional lines during several decades of British rule. It created a national ferment, which may not have transformed the quality of education at the primary stage, but which has certainly left its impact on educational thought and practice in a much wider sphere."

The Learning Society of the future has to be "founded on the acquisition, renewal and use of knowledge." The Delors Report states: "As the development of the 'Information Society' is increasing the opportunities for access to data and facts, education should enable everyone to gather information and to select, manage and use it."

### **National Policy on Education**

The National Policy on Education, 1986, gives a lot of emphasis on Continuing Education, which is "an indispensable aspect of the strategy of human resource development and of the goal of creation of a learning society." It includes "post-literacy for neo-literates and school drop-outs for retention of literacy skills, continuation of learning beyond elementary literacy, and application of the learning for improving their living conditions." The Committee for Review of National Policy on Education (NPE) 1986 was chaired by Acharaya Ramamurti. In 'Towards an Enlightened and Humane Society' prepared by the Committee, he says: "What we want is a new education. We want education for life. We want education for all, not for a chosen few." In the same vein Acharaya Ramamurti expresses his

emotions and sentiments as follows: “The need of the hour is that education truly becomes a people’s movement, and it ceases to be a routine departmental activity left to the initiative and judgement of the people at the desk, controlled and guided by those far removed from where people live and work. Only then will education become a preparation and discipline for life, a liberating force. Integrated with life and work, it will make the Right to Work a reality. Education will then develop the power to fight, in the minds of men and women the battle against pride, prejudice and passion and forces that destroy cherished values and the best interests of the common people.” There are moments in history, when a new thrust is to be given to an age old process. Those moments have come.

The Conference may discuss the following sub-topics in Groups, before formulating its recommendations, which would eventually form the basis for evolving a Declaration:

- a) Lifelong Learning – Obstacles and Prospects
- b) Critical importance of adult learning
- c) Lifelong education for future in the context of the emerging technology of the ‘Information Society’.
- d) Future Policy on Adult Learning.

## **Bangalore Declaration**

The 48th All India Adult Education Conference, held at Bangalore on 21-33 December 1998, under the joint auspices of the Indian Adult Education Association and the Bangalore University, on Adult Education in the Perspective of Learning Throughout Life;

Realising that the idea of lifelong education is the keystone of the learning society;

Recognising the two fundamental concepts of lifelong education and learning society remaining in the core of the topic of the Conference;

Appreciating the concepts and ideas contained in the Working Paper, which did set the trend of the Conference;

Learning from the wisdom contained in the inaugural address and the presidential address;

Considering the findings in the Reports of the four Groups constituted for the purpose;

Endorsing the comments and suggestions offered by member organisations, individual members, Zilla Saksharata Samiti functionaries, University Departments of Adult, Continuing and Extension Education, and other distinguished delegates representing the voluntary organisations;

Echoing the voices generated in the five thematic Workshops;  
Declares that:

- 1) Tremendous changes are taking place due to the new economic policy in India. This is influencing the rural and urban communities socially economically and culturally. The economic theory propounded by Nobel Laureate Amartya Sen and the late M. Huq places the emphasis on human development. To interpret these changes there are significant challenges for lifelong learning.
- 2) Terminal concept of education is not adequate in the present social, economic and technological context. It recommends that learning opportunities should be provided to all in the emerging era of information technology.
- 3) Adult education should promote a new vision of older adults recognising them as responsible persons and a productive force in society.
- 4) For achieving the objectives of lifelong learning some changes in the formal education system must be made. It should create an aptitude and sustain the desire for learning. Such an aptitude will go a long way in promoting self-learning among adults.
- 5) Lifelong learning will get a boost if Continuing Education Centres, being established in the country, are provided proper physical facilities and the persons appointed for the jobs should be adequately trained and remunerated.

- 6) The Continuing Education Centres should develop their curricula based on the issues that emerge from the lives of the adult learners. Issues such as exploitation and oppression, income and wage, land and water, rights and duties, understanding economic forces, gender discrimination etc. should be considered.
- 7) To follow the curricula based on the issues, the adult educator has to prepare himself/herself analysing the issues with the people and develop a strategy not only to understand the issues but also help people in organising them around the issues.
- 8) Development should be focused on village based industries such as agro-industries, cottage industries and Continuing Education Centres should play an important role not only in skill development but in management of such industries by the village people themselves.
- 9) The methods and techniques of lifelong learning should be in phase with the present day modern information and technological developments such as mass media, distance education, Internet and E-mail. The folk forms of communication and the rural libraries should be extensively used for the purpose.
- 10) The most important factor for organising lifelong learning is community participation, which should not only be limited in identifying, implementing, as well as monitoring and evaluation of the continuing education programmes.
- 11) There is a tremendous impact of information technology on the present day society. Information technology which is already here could be beneficial as well as equally harmful depending upon how and by whom it is used. It should be used for lifelong learning to create scientific temper, skill development, life skill learning, ecology and environment.

K.C. Choudhary

## **IAEA during 1998**

It gives me immense pleasure to welcome you to the General Body Meeting of the Indian Adult Education Association and to present to you the report of the Association since we met in Hardwar on 28 November 1997.

### **The Macro Scene**

The Total Literacy Campaign has been the main strategy, since 1989, to promote literacy in the country. About 450 districts have been covered under literacy programme so far. Out of this, 215 are under the Total Literacy Campaign, 173 under Post-Literacy Programme and 59 under Continuing Education.

The Total Literacy Campaigns have succeeded at certain places but have not worked well in many districts, particularly in the Hindi belt. The objective of making 10 crore people literate by the year 2000 seems to be a distant dream. The results do not seem to commensurate with the efforts made and money spent. The approach seems to be stagnating now and the enthusiasm and commitment, which was visible earlier, is not seen now.

In spite of large scale expansion of the programme the literacy education continues to receive low priority from the learners. The need now is to evolve new strategies to combat the problem. The programme should be decentralised. A Block/Taluk should be taken as a unit for implementation rather than a district as a whole. The Panchayati Raj Institutions (PRIs), particularly the village Panchayats have to be actively involved in the programme. The Panchayats should be provided with funds and facilities for the purpose, and it should be made obligatory for Panchayats to achieve total literacy. The meaningful involvement of community leaders will give a boost to the programme.

The post-literacy programme now in operation in 173 districts is being implemented without a clear cut strategy which is affecting the quality of the programme. The gap between the literacy and post-literacy phases has considerably affected the earlier achievements. Many districts where the literacy programmes were completed three to four years ago have not started the post-literacy programme. There is a lapse in literacy in many places. There should not be any gap between the literacy and post literacy phases and in the ideal situation the continuing education centre should be started at the beginning of the programme. It will not only create a favourable environment for literacy but also provide the community an opportunity to continue their education. It will also help in developing reading habit among the people.

The University students by and large have not been involved in literacy campaigns. Their involvement could give a boost to the programme. The need is to work out a strategy for involvement of university students in literacy

programme. There should be a meaningful coordination between the NLM and UGC at the National/State/District levels. The Departments/Centres of Adult, Continuing Education and Extension should also actively be involved in the training of resource persons, preparation of teaching/learning materials, research and evaluation.

The Population Education Project is in operation since 1987. The third phase of the project called the 'Population and Development Education in Post Literacy and Continuing Education' has been launched recently. The objective is to have Population Education reconceptualised in the context of the ICPD programme of action in the post-literacy and continuing education programmes and to create a positive attitude towards population and development issues leading to responsible behaviour among the neo-literates, panchayat members and the community at large. The objectives of the project are laudable, but to make it an integral part of post-literacy and continuing education there is an urgent need to prepare relevant and need based materials on Population Education which could effectively help in achieving the ultimate goal of population stabilisation and sustainable development. The resource persons at the Block level should be involved to provide support to volunteers in the programme.

### IAEA ACTIVITIES

#### **Zonal Conferences**

The Association organised the North Zone and East Zone Conferences on Adult Education during the period.

#### **Srinagar (Garhwal)**

The IAEA, in collaboration with the Centre for Adult, Continuing Education and Extension, HNB Garhwal University organised the Central Zone Conference for the States of Bihar, M.P., Rajasthan and U.P. at Srinagar, Garhwal (U.P.) on 12-13 June 1998. The Conference was inaugurated by Shri Sunderlal Bahuguna, noted environmentalist, and was presided over by Shri BL Parakh, Vice-President, IAEA, and Chairman, Central Zone. The Guests of Honour were Prof. BS Garg, President, IAEA, and Prof. KP Nautiyal, Vice-Chancellor of the Garhwal University.

Sarvashri KC Choudhary, AL Bhargava and AH Khan, General Secretary and Associate Secretaries respectively also participated in the Conference.

75 delegates from four States attended the conference.

The delegates discussed the following sub-themes:

- a) Role of Universities in Adult Education
- b) Role of voluntary agencies in Adult Education
- c) Strategies to accelerate Adult Education programme in the Central Zone

**Calcutta**

The East Zone Conference was organised by IAEA in collaboration with the All India Council for Mass Education and Development in Calcutta on 30 August, 1998. 32 participants from the States of Orissa and West Bengal participated.

Prof. BB Mohanty, Vice-President, IAEA, and Zonal Chairman, presided over the Conference.

The Conference was inaugurated by Prof. Basudev Barman, Vice-Chancellor, Kalyani University.

Shri JL Sachdeva, Director, IAEA presented the Working Paper on the theme "Problems in the Zone with the special emphasis on the Role of Universities and Voluntary Agencies in Literacy Campaigns and Continuing Education Scheme".

Shri KC Choudhary, General Secretary, Shri Sudhir Chatterjee and Smt. Rajashree Biswas, Members of Executive Committee, IAEA, also participated. The Valedictory Address was given by Prof. Anil K Sarkar, General Secretary, Asiatic Society, Calcutta.

**47th All India Adult Education Conference**

The 47th All India Adult Education Conference was organised by IAEA in collaboration with Gurukul Kangri Vishwavidyalaya in Hardwar on 27-30 November 1997.

The Conference was inaugurated by Prof. Dharam Pal, Vice-Chancellor, GKV, and was presided over by Prof. BS Garg, President, IAEA.

During the inaugural function the Nehru and Tagore Literacy Awards for 1996-97 were presented. The recipients were Shri Tarlok Singh (in absentia) and Prof. CL Kundu. Prof. Kamlini H Bhansali (in absentia) and Smt. Kamala Rana.

Over 200 delegates from 18 States participated in the Conference.

The delegates discussed the following sub-themes:

1. Strategies for Adult Literacy in the 21st Century
2. Broadening the Scope of Adult Education in the 21st Century
3. Adult Education for Democracy and Human Rights
4. Role of Adult Education in the New Economic Policy
5. Adult Education and Empowerment of Women
6. Research in Adult Education - Needs and Priorities

Five thematic workshops were also organised during the Conference.

**Workshops on Role of Education and Training in Natural Disaster Management**

The IAEA, in collaboration with and support from the Government of India in the Department of Agriculture and Cooperation, Ministry of Agriculture organised the following workshops on "Role of Education and Training in Natural Disaster Management" during the period under report.

**National Workshop, New Delhi**

The National Workshop was organised in New Delhi on 11-12 August 1998 at the Jamia Hamdard University. It was inaugurated by Prof. AW Khan, Vice-Chancellor, Indira Gandhi National Open University (IGNOU). Prof. BS Garg, President, IAEA presided. Shri KC Choudhary, General Secretary, IAEA, welcomed the dignitaries and the participants.

Shri Anil Sinha, Joint Secretary and Additional Relief Commissioner, Ministry of Agriculture, Government of India, delivered the key-note address.

In the plenary sessions the following papers were presented:

1. Natural Disaster Management - An Overview
2. Role of NGOs in Management of Natural Disasters
3. Role of Education and Training in Natural Disaster Management
4. Role of Adult Education in Creating Awareness about Natural Disaster Management
5. Role of Media in Creating Public Awareness about Natural Disaster Management

About 50 delegates from different parts of the country attended the Workshop.

**East Zone Workshop, Calcutta**

The East Zone Workshop on "Role of Education and Training in Natural Disaster Management" was held in Calcutta on 28-29 August 1998. It was organised in collaboration with the All India Council for Mass Education and Development. Hon'ble Shri AR Kidwai, Governor, West Bengal, inaugurated it. Prof. Naren De, Minister of Agriculture, West Bengal Government, was the Guest of Honour on the occasion.

Shri Anil Sinha, Joint Secretary and Additional Relief Commissioner, NDM Division, Ministry of Agriculture, Dr. Phulrenu Guha, President, AICMED, Prof. BB Mohanty, Vice-President, IAEA and Shri KC Choudhary, General Secretary, IAEA also participated in the inaugural function.

The workshop brought together 50 representatives from the East Zone.

In the first plenary session, Shri Anil Sinha delivered the key note address. Among others, who participated in the plenary session were Dr. Arbinda Bose, Dr. Chittabrata Palit, Dr. Kazi M.B. Rahim and Dr. Ashis Ghosh.

**Central Zone Workshop, Bhopal**

The Central Zone Workshop on “Role of Education and Training in Natural Disaster Management” was held in the Academy of Administration, Bhopal, M.P. on 9-10 October 1998. It was organised in collaboration with the M.P. Branch of IAEA.

64 participants from the states of Bihar, M.P., Rajasthan and U.P. participated.

It was inaugurated by Shri Mahesh Joshi, Chairman of the 20-Point Programme of the Government of Madhya Pradesh. Prof. BS Garg, President, IAEA presided. Shri Kailash Pant, Chairman of the M.P. Branch of IAEA conducted the proceedings of the conference.

Shri SC Behar, IAS, former Chief Secretary of the State Government and Director-General of the MP Academy of Administration delivered the valedictory address.

**Round Table Discussion**

A round table discussion on “New Dimension in Adult Education in Africa” was organised by IAEA in New Delhi on 29 October 1998. Dr. James A Draper, Professor Emeritus, Ontario Institute of Studies in Education, Toronto, Canada, was the Guest Speaker on the occasion.

Over 30 participants representing the Delhi University, Jawaharlal Nehru University, Jamia Millia Islamia and other governmental and non-governmental organisations attended.

Smt. Kamala Rana, Vice-President, IAEA presided.

Shri KC Choudhary, General Secretary, IAEA proposed a vote of thanks.

**Formation of Programme Specific Sub Committees**

The Association has formed the following Programme Specific Sub-Committees to undertake the priority programmes in adult education. The names of the Committees alongwith the names of the Conveners are given below:

- |   |                   |
|---|-------------------|
| 1. Literacy, Post Literacy and the Universalisation of Education        | Shri BL Parakh    |
| 2. Education for Women’s Empowerment                                    | Smt. Kamala Rana  |
| 3. Environmental Education for Sustainable Development and Human Rights | Shri KC Choudhary |
| 4. Workers Education for Occupational Health and Safety                 | Shri BN Kamble    |

|   |                        |
|---|------------------------|
| 5. Migrants' Education                      | Shri AH Khan           |
| 6. Indigenous Education                     | Shri Sudhir Chatterjee |
| 7. Older People and Adult Learning          | Prof. NN Joshi         |
| 8. HIV/AIDS Education, Adolescent Education | Shri RN Mahlawat       |
| 9. Vocational Education & Training          | Smt. Nishat Farooq     |
| 10. Information Technology                  | Prof. BB Mohanty       |
| 11. Policy Research and Advocacy            | Dr. KS Pillai          |
| 12. Leadership Development                  | Shri NC Pant           |
| 13. Science for Masses                      | Dr. Arun Mishra        |

**Computer Education for Women**

The Computer Education course which was started in 1996 for women of the weaker sections has now completed its three terms of six months each. The fourth course was started in October this year with 22 participants. The Central Social Welfare Board is providing financial assistance for the purpose. The Shramik Vidyapeeth, Delhi is collaborating with IAEA in the organisation of this course.

**Documentation Centre on Literacy and Population Education**

The Documentation Centre on Literacy and Population Education, established in 1995 with financial assistance from the Directorate of Adult Education, Government of India under the UNFPA Population Education Project, continued to publish the following periodicals during the period under report:

1. Indian Journal of Population Education
2. Newsletter on Literacy and Population

It also brought out bibliographies on Population Education. The material on literacy and population was also repackaged during the period.

The Documentation Centre is being used by research scholars, practitioners and professionals of SRCs, Universities, SCERT, DIET etc.

**Periodic Publications**

The Association continued to publish the following periodic publications during the period under report:

1. Indian Journal of Adult Education
2. Proud Shiksha
3. IAEA Newsletter
4. Jago aur Jagao

**Diamond Jubilee**

The Association will be celebrating its Diamond Jubilee in 1999-2000. A Steering Committee to chalk out programme for the Diamond Jubilee has been set up. The first meeting of the Steering Committee was held in New Delhi on 18 June 1998. Among others, who attended the meeting were Shri Bhaskar Chatterjee, DG(NLM), Shri VS Mathur, former President, IAEA, Shri BC Rokadiya, Dr. SY Shah and Shri Prem Chand. Proposal for organisation of Seminars, Workshops and Round Tables during the Diamond Jubilee Year has been sent to the Ministry of Human Resource Development, Department of Education, for financial assistance.

**Amarnath Jha Library**

The Amarnath Jha Library of the Association continued to serve the adult education functionaries of different parts of the country. It is being modernised with financial assistance from the Department of Education, Ministry of HRD. The process of bringing the library under our computer network has started.

**State Branches**

The Association has established branches in the following ten States : Bihar, Gujarat, Haryana, Kerala, M.P., Maharashtra, Orissa, Rajasthan, U.P. and West Bengal

The nine States have already convened their first meeting and have elected Chairmen and Office-Bearers of the State Branches. The following have been elected Chairman of the branches:

|             |   |                           |
|-------------|---|---------------------------|
| Bihar       | - | Shri Dwariko Sundarani    |
| Gujarat     | - | Shri Mafatbhai Patel      |
| Haryana     | - | Shri RN Mahlawat          |
| Kerala      | - | Dr. KS Pillai             |
| M.P.        | - | Shri Kailash Chandra Pant |
| Maharashtra | - | Shri BN Kamble            |
| Rajasthan   | - | Shri Bhai Bhagwan         |
| U.P.        | - | Dr. Madan Singh           |
| West Bengal | - | Prof. Anil K Sarkar       |

**Nehru and Tagore Literacy Awards**

The 1998 Nehru and Tagore Literacy Awards were awarded to Dr. DP Pattanayak, former Director, Central Institute of Indian Languages and Ms Mahasweta Devi, noted educationist and social activist for their outstanding contribution in the promotion of adult education in the country.

**Service to Members**

The IAEA provided information on different aspects of adult education in India and abroad to both institutional and individual members.

**Honoured**

The Central Board for Workers Education has nominated Shri KC Choudhary, General Secretary, IAEA as Chairman, RAC, WEC, Indore, for a term of two years. He was also elected Vice-Chairman of the Indian Institute of Public Administration, MP Branch.

**M.U. Alam**

## **Educational Innovation for Sustainable Development: An Indian Experience**

India has the largest educational network in the world, but ironically it has the highest number of illiterates too. Despite the efforts made for universalisation of Primary Education and Adult Education in the past, the number of illiterates has progressively increased from 300 million in 1951 to 440 million in 1991. 'Literacy is considered as one of the indicators of educational development. It facilitates effective discharge of social, cultural, religious and economic responsibilities. Literacy is envisaged as an effective instrument of realisation of important objectives of macro policy, focusing mainly on socio - economic change'.<sup>1</sup> But, eradication of illiteracy is crucial to the achievement of important national objectives such as universalisation of elementary education, significant reduction in infant mortality rate, acceptance of small family norms, improvement in women's status and alleviation of poverty.

Several attempts to eradicate illiteracy from our country was made, but literate India is still an illusion. "The National Literacy Mission was set up in 1988 with the objective of making 80 million persons in 15-35 age group functionally literate by the year 1995 but subsequently changes were made in the target which now stands at 100 million people in the same age group to be made literate by the year 1999 and full literacy is projected to be achieved by 2005."<sup>2</sup> A nation-wide campaign is going on in India, but progress has been slow. Innovative efforts for acquiring full literacy is, therefore, a must for educational development.

### **Education and Sustainable Development**

Education sharpens the eye of knowledge, develops awareness and makes mind logical. Without proper education the scope and extent of the processes of socio - economic changes cannot be understood by a common man and he cannot take part in the process of development.

In a study it is mentioned that education is a potential tool for economic growth. Interestingly, it is in the very poor countries (with GNP per capita less than \$ 500), that the formal system of education has a very important role, while in the very rich countries (with GNP per capita above \$ 2000) the results do not establish any significant relationship between education and economic growth. Further, in the very poor countries it is the first level education that influences economic development and in the rich countries (with GNP per capita above \$ 1000), it is the

secondary and higher education that have a significant role in economic development. Further, the study established that education reduces poverty significantly. Here again, literacy and the first and second levels of education only have a significant role in this task when it comes to income distribution. It increases the share of the lowest 40 per cent of the population in the cake of national income and clearly reduces the share of the top 20 per cent of population. Finally, the study concluded that in this unequal and interdependent world economy education has a significant role to play. Education increases economic growth, attacks poverty, improves income distribution and reduces inequality.<sup>3</sup> Ignorance and poverty in most of the developing countries are two fundamental problems and ignorance is directly related to illiteracy.

Sustainable development is the internationally accepted goal for the 21st century. It has become something of a modern buzzword, whose meaning becomes more imprecise the more it is repeated. In the World Conference on Environmental Development (WCED) 1987, sustainable development came to the world agenda and the Conference brought political leaders and environmental groups on one platform to discuss it. Since then, the meaning of sustainable development is defined from different angles. According to the Brundtland Commission 1987, "... is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.... living standards that go beyond the basic minimum are sustainable only if consumption standards everywhere have regard for longterm sustainability". The Blueprint for a Green Economy, 1989, states, "..... involves providing a bequest to the next generation which is at least equal to that inherited by the current generation". As per 'Our Own Agenda, (Inter - American Development Bank, 1990) "Development that distributes the benefits of economic progress more equitably, protects both local and global environments for future generations, and truly improves the quality of life", According to 'Caring for the Earth, IUCN, ENP and WWF', 1991, "Sustainable development means improving the quality of life while living within the carrying capacity of supporting ecosystems. A 'sustainable economy' maintains its natural resource base. It can continue to develop by adapting, and through improvements in knowledge, organization, technical efficiency, and wisdom".<sup>4</sup>

From the above it is clear that, the meaning of sustainable development has different perceptions, but there is a broad agreement about what will be needed to achieve it. The first and foremost thing is the elimination of poverty. It is accepted by all concerned that illiteracy breeds poverty. Thus, literacy is an important component for sustainable development. Therefore, new innovations are essential for the development and growth of literacy in countries like India. The aim of the present study is to give some ideas on innovative methods in literacy on the basis of past experiences in the Indian context.

**State of Education in India**

There is no country where the love of learning had so early an origin. The laws of Manu and other Dharma Shastras record regulations of studies, Famous seats of learning were Taxila and Ujjain in the early centuries of the Christian era, Ayodhya, Nalanda and Patliputra during the Gupta period and Banaras, Sringeri and Nadia later on. After the Muslim conquest, many emperors, particularly Akbar, were interested in patronising education of their subjects.<sup>5</sup>

Even today, India has the largest educational network in the world. There are 59 million Primary Schools, 17 million Upper Primary Schools 65,000 Secondary Schools, 7,153 Colleges, 167 Universities including 28 Agricultural Universities, 36 deemed to be Universities, Five IIT's and about 28 million Non-formal Education centres.<sup>6</sup> The system caters to an enrollment of 150 million children in the age-group of 6-14 years. 94 per cent of Indian rural population is served by a primary school within a radius of one kilometer. The largest number of school teachers (more than 3 million) in the world are in India. The total student enrollment in the Universities is 6 million. India produces the largest number of graduates in the world. Indian achievement in the world of science, technology, atomic energy and space research has been magnificent. According to the Census of 1991, the literacy rate of our country is 52.21 per cent.

If the current rate of literacy progress continues, it is assumed that the country could enter the 21st century with the maximum number of illiterates in the world. Literacy rate (52.21%) at the national level reveals only a part of the disparities in literacy situation in the country.<sup>7</sup> Literacy rates among the States/ Union Territories range from 89.81 per cent in Kerala to 38.48 per cent in Bihar. Difference between the highest and the lowest rate among States/ Union Territories (UT) is of the order of 51.53 per cent points which is even higher than the literacy rate in Bihar. On the basis of literacy rate, State / UTs can be grouped as under:

**Below 50 per cent in 9 States/UTs :** Bihar (38.48), Rajasthan (38.55), Dadra and Nagar Haveli (40.71), Arunachal Pradesh (41.59), Uttar Pradesh (41.60), Andhra Pradesh (44.09), Madhya Pradesh (44.20), Orissa (49.09) and Meghalaya (49.10).

**50 to 60 per cent in 8 States/UTs :** Assam (52.89), Haryana (55.85), Karnataka (56.04), Sikkim (56.94), West Bengal (57.70), Punjab (58.51), and Manipur (59.89).

**60 to 70 per cent in 5 States/UTs :** Tripura (60.44), Gujarat (61.29), Nagaland (61.65), Tamil Nadu (62.66), Himachal Pradesh (63.86) and Maharashtra (64.87).

**70 to 80 per cent in 6 States/UTs :** Daman and Diu (71.20), Andaman and Nicobar Island (73.02), Pondichery (74.74), Delhi (75.29), Goa (75.51) and Chandigarh (77.81).

**80 per cent and above in 3 States/UTs :** Lakshadweep (81.78), Mizoram (82.27)

The State Jammu and Kashmir was not covered in the Indian Census 1991.

Gender disparity in literacy is a historical phenomenon. While in 1901, the Indian literacy rate was 9.83 per cent, it was only 0.60 per cent in case of females. As per the 1991 Census, male-female literacy rate is 64.13 per cent and 39.29 per cent respectively. Male-female difference in literacy rate is 24.84 per cent. State-wise variation of this rate is remarkable. While literacy rate for male population varied from 93.62 in Kerala to 51.45 in Arunachal Pradesh, literacy rate for female population varied from 86.17 in Kerala to 20.44 in Rajasthan. Among the States the highest literacy rate of 95.58 per cent was in case of Kerala's urban male population, and the lowest rate of 11.59 per cent was in case of Rajasthan's rural female population.

At the time of Indian Census 1991, there were 466 districts in the country; presently it is 520. Of the 466 districts census data is available for 452 districts, because the state Jammu and Kashmir was not covered in the Census, as a result of which, data from the 14 districts of that state was not available. Disparity in the district level was more acute. It varied from 95.72 per cent in Kottayam district of Kerala to 19.01 per cent in Jhabua district of Madhya Pradesh. Highest literacy rate of 97.67 per cent was in respect of urban male population of Kottayam district and the lowest rate of 4.2 per cent was in the case of rural female population of Barmer district of Rajasthan. There are 27 districts in the country which are still below 30 per cent literacy rate. More than half of the total districts in the country are still having literacy rate below 50 per cent. Only 21 districts forming less than 5 per cent of the total districts in India are above 80 per cent mark. Position of literacy in urban areas is better. If we take into account the literacy rate of only rural areas, the number of districts, which fall below 30 per cent literacy rate, rises to 64 and the number of districts with rural literacy rate of below 50 per cent rises to 282. There are only 17 districts in the country where the rural literacy rate is higher than 80 per cent.

There are 73 districts in the country which still have female literacy rate below 20 per cent including 2 districts of Rajasthan having literacy rate below 10 per cent. Of these 73 districts of the country, 66 districts i.e. 90.4 per cent are located in the four low literacy Hindi speaking states of Madhya Pradesh (10), Bihar (18), Rajasthan (19) and Uttar Pradesh (19) which are known as BIMARU (Sick) States. There are 27 districts in the country which have rural female literacy rate of below 10 per cent. The number of districts having rural female literacy rate of below 20 per cent was 134, forming about 30 per cent of the total districts of the country in 1991.

Over the years, while the percentage of literacy has been going up, the number of illiterates was also on the increase. After independence, India had a literacy rate of 16.67 per cent in 1951, which increased to 52.21 per cent by 1991. Yet, the

magnitudes of the problem of illiteracy in India remains very large. Of the 948.1 million adult illiterates of the age group 15 and over in the world, 280.7 million forming 29.6 per cent were in India in 1990. No other country of the World, except China with 223.7 million illiterates, had more than 50 million adult illiterates. Several attempts were made for eradicating illiteracy in the independent and pre-independent India. Adult literacy programmes in India have primarily been aimed at the most productive and reproductive age-group of 15-35.

### **Adult Education Movement in India after Independence**

Elimination of illiteracy has been one of the major concerns of our government since independence in 1947. An ambitious programme of Social Education was launched in the First Five Year Plan (1951 to 1956). The concept of Adult Education, which was mostly confined to literacy, was found to be too narrow to be able to meet the various needs of the adults. It was therefore, widened to include, in addition to literacy, health, recreation and family life of adults, their economic life and citizenship training. Social education implies comprehensive programme of community uplift through community action. This was integrated with community development. Although the provisions of funds in the second, third and fourth Five Year Plans was meagre, several significant programmes at the state level as well as at the national level were launched. The **Gram Shikshan Mohim** at the state level in Maharashtra and the Farmers Training and Functional Literacy and Non-Formal Education programme at the national level started during the fourth Plan (1969 - 1974) and were continued during the fifth Plan (1974 - 1979).

The first serious attempt at the national level to achieve adult literacy, qualitatively, different in scope, content, approach and methodology as compared to previous programmes, was the launching of the National Adult Education Programme (NAEP) on a massive scale in 1978. The NAEP aimed to cover 100 million illiterate masses (both men and women) in the age group 15-35 in 5 years. The main objectives of the programme were:

- (i) To reduce the incidence of illiteracy among adults in the age-group 15-35
- (ii) To bring about functional improvement.
- (iii) To create awareness about the social and economic exploitation.
- (iv) To utilise the new wave of enthusiasm and expectations emerged through NAEP for planned group action remove the social and economic handicaps among which these masses are living.

It had three major elements: Literacy, Functionality and Awareness. Literacy comprised reading, writing and numeracy i.e. 3Rs; Functionality consisted of imparting necessary skills to adults in order to enable them to become more productive; and the component of Awareness was meant to create consciousness among

adults about their socio-economic status, policies and programme of the government, so that they can derive optimum benefit.

The NAEP was reviewed during the Sixth Plan (1980 - 1985). A high power Committee under the chairmanship of Dr. D.S. Kothari was set up to assess the progress of the NAEP and suggested improvements. On the basis of the report submitted by the Committee in 1980, the adult education programme formed part of the 'Minimum Needs Programme' during that plan period. The Plan document envisaged complete removal of adult illiteracy in 15-35 age group by 1990. It also laid emphasis on minimum essential education to all citizens, irrespective of their age, sex and residence. The approach to achieve that objective would be characterised by flexibility, inter-sectoral co-operation and inter-agency co-ordination. But, the NAEP failed to achieve its goal even by 1990 for the following reasons.

(i) It was observed that the NAEP would be a mass programme or mass movement, but it remained primarily confined to a Government funded and Government controlled programme. It was also a traditional centre-based programme where every adult education Instructor was expected to impart functional literacy to a group of 30 learners at a place called "Adult Education Centre". The entire programme was highly structured from top to bottom in shape of projects centres, honoraria, etc.

(ii) In a mass programme, there were, two sides- (a) supply side, and (b) demand side. The supply side comprised the infrastructure, delivery mechanism, etc. The demand side was the felt need of the people for literacy. Such felt need may or may not exist, it has to be specifically generated. Unfortunately, the NAEP, which remained on the ground for nearly 12 years (1978 - 1990), the Government was too much obsessed with the supply side i.e. the delivery mechanism by way of creating projects, centres, functionaries etc. but paid little or no attention to the demand side. The Government took it for granted that if an 'Adult Education Centre' was opened, it would automatically attract the adult learners, irrespective of their age, working and living conditions, socio-economic and cultural milieu and a host of other compulsions which inhibit their day to day life. Even the supply side itself was fraught with several deficiencies and shortcomings, gaps and omissions. No doubt, the structure was created with the best intentions; but over the years, the structure tended to consolidate itself around loaves and fishes of the office and often totally losing sight of the objective of imparting functional literacy for which it was created.

(iii) The adverse factors which stood in the way of the various literacy programmes were the uncongenial learning environment, inadequately motivated trainers, discontinuities in the learners participation, deficiencies in the monitoring and feedback mechanisms and the pervasive 'fatigue factor' with respect to voluntary agencies caused by the compulsion to observe rigid Government rules, and above all, a lack of societal will which was essential for such a programme.

The National Policy on Education (NPE), 1986, emphasized the importance of Adult Education, especially in the context of public participation in National Development Programmes. The Programme of Action (POA), 1986, envisaged a new National Programme of Adult Education (NPAE) emphasizing skill development, creating of awareness among the learners of the national goals of development programmes and for liberation from oppression. With this backdrop the Government of India launched the 'National Literacy Mission (NLM)' on 5 May 1988. The NLM sought to correct both distortions and imbalances of the earlier programmes with a view to converting it from a Government funded and Government-controlled programme to a 'people's programme' or 'people's movement'.

### **National Literacy Mission**

The basic objective of the National Literacy Mission is to impart functional literacy to 80 million illiterate persons in 15-35 age group by 1995 i.e., 30 million by 1990 and additional 50 million by 1995. The focus was on rural areas with special concern for women and persons belonging to scheduled castes and scheduled tribes. Key factors for the success of NLM are national commitment, people's involvement, technopedagogic inputs to improve training and teaching / learning process and efficient management and monitoring.<sup>8</sup> There were some clues in the policy framing of the NLM. The Ernakulam experiment provided an excellent model for planning and implementation of massive campaign in a district and provided the clues to the NLM policy makers.

Ernakulam is a district in Kerala having the geographical area of 2408 square kilometre with a population of 25,35,294. As per the Indian Census 1991, among the Indian states, Kerala has the highest percentage of literacy (89.81) and Ernakulam has been one of the highest literate district since 1901. According to Indian Census 1981, there was 23.18 per cent illiterate population in Ernakulam. Thus, the illiterates in Ernakulam were living in a highly literate environment. The Kerala Sastra Sahitya Parishad (KSSP) involving other voluntary agencies launched an experimental literacy movement in Ernakulam. This experiment was actively supported by the district administration which created a mass upsurge for literacy and gave birth to the concept of 'Total Literacy Campaign (TLC)'. The KSSP, a very popular voluntary organisation, took a leading role to make Ernakulam a total literate district. The Ernakulam Total Literacy Project was inaugurated on January 26, 1989 with the theme 'Lead Kindly to Light'. The then Prime Minister of India, Mr. V.P. Singh, on 4th February 1990, declared Ernakulam as the first literate district in India. The specific features of this programme can be summarised as follows:

- (i) The close organisational mesh envisaged to catch every one, illiterates in the age group of 5-60 as well as the other people of the district.
- (ii) The intensive campaign and environment generation to create a psychological compulsion to 'go along'.

(iii) The life oriented academic programme flexible enough and exciting enough to sustain the learner's motivation.

(iv) All out integration of all other social and developmental activities of the area, like latrine, chulha, (oven), housing, immunization, drinking water etc. with the programme.

Modelled on the Ernakulam experience, the revised NPE, 1992 reported that after experimenting with successive alternative models of literacy programmes, "we have settled down to one which is known as campaign for total literacy which is area specific, timebound, volunteer-based, cost effective and outcome oriented".<sup>9</sup> On the basis of this, the literacy activities are going on through a Zilla Shaksharata Samiti headed by the district collector with the desire to create an environment conducive to literacy.

### **Total Literacy Campaign (TLC)**

The programme implemented in the NAEP on 'Centre - based' approach till the launching of NLM, has been shifted to 'Mass Approach'. The main characteristics of the Mass Approach are as follows:

(i) Literacy as a means of Empowerment and Development.

(ii) The well defined goals are - area specific, time-bound and total coverage for a given age group.

(iii) The TLC is a volunteer-based approach under the Zilla Saksharata Samities (ZSS), participation of all sections of the society including Non Governmental Organisations (NGO) will be ensured.

(iv) Environment building and mass mobilisation are important components for the success of TLC. For that purpose organisation of Jathas, folk and electronic media, person to person contact and conventions and pledges are essential.

(v) Improved pedagogy with emphasis on learning outcomes be used.

(vi) It is a cost effective programme.

(vii) Stress was given on Post-Literacy (PL) and Continuing Education (CE).

The implementation of TLCs are going on throughout the country following the above characteristics of TLC. In the TLC, the duration of the functional literacy programme is 200 hours spread over 5-6 months. Functional literacy implies:

(i) Achieving self-reliance in literacy and numeracy;

(ii) Becoming aware of the causes of their deprivation and moving towards amelioration of their condition through organisation and participation in the process of development;

(iii) Acquiring skills to improve the economic status and general well-being.

(iv) Imbibing the values of national integration, conservation of the envi-

ronment, women's equality, observance of small family norm, etc.

Under the TLC the endeavour is to provide education to all children and adults who have been denied the opportunity. Special focus is on women and girls and scheduled castes and scheduled tribes. The objective is to achieve 80-85 per cent literacy in each target or focus group. The TLC is based on the assumption that there would be active involvement of the community, students, youths, elders, women activists, voluntary workers and the persons who are expected to benefit from the literacy campaign. The teaching-learning process in the TLC is based on pedagogy known as 'Improved Pace and Content of Learning (IPCL)' The TLC has in-built arrangements for monitoring a non-threatening internal testing besides assisted self-evaluation. This is carried out on the network of full-time and part-time functionaries to establish the worthwhileness of the effort and the credibility of the programme. The officials and members of the National Literacy Mission Authority (NLMA) pay pre-launch appraisal visits and periodic on-course visits to the district. Monthly status reports of all the TLC and PL campaigns are compiled by the Central Directorate of Adult Education on the basis of progress reports received from the districts. On conclusion of the campaigns, external evaluation reports are commissioned from reputed institutions of social research, management and Universities. Weightages in the 3Rs are: in reading-40 marks, in writing-30 marks, and in numeracy-30 marks. Cut-of points are 50 percent in each skill and 70 percent in aggregate.

### **Current Status of TLC in the Country**

In a document, published by the Central Directorate of Adult Education in the year 1995 the status of TLC and PLC are stated as follows:<sup>10</sup>

**TLC programme is going on in the 356 districts of the country.**

**151 districts are in PL phase.**

**100 million illiterates in the age group 15-35 are to be made literate by 1997.**

**The NLMA has already sanctioned projects to cover 130 million.**

**Number of learners enrolled in all NLM scheme is 78 million.**

**49.89 million people have already been made literate; of them 62 per cent learners are females and 38 per cent are males. Achievement in case of scheduled casts and scheduled tribes are 21 per cent and 10 per cent respectively.**

**9 states and 3 Union territories have been fully covered through TLCs.**

In a recent document of the NLM, it has been stated that "changes were made in the target which now stands at 100 million people to be made literate in the same age group by the year 1999 and full literacy to be achieved by 2005. So far NLM has sanctioned 419 literacy projects which are being implemented in 427 districts. Out of these, 187 districts have moved to the post literacy phase after successfully completing the literacy phase".<sup>11</sup>

### The Centre for Adult and Continuing Education (CACE) in Achieving the National Goal

After introduction of the NAEP in 1978, 68 Universities and 705 Colleges of the country were assisted for implementing the NAEP with the following objectives:<sup>12</sup>

(a) To enable the universities to establish the necessary linkage with the community for offering need based and relevant educational programmes that may ultimately facilitate self-reliance.

(b) To provide opportunities for disseminating knowledge in all walks of life in different segments of population so as to enable individuals and groups to fill up the gaps in their intellectual growth, professional and technical competence and understanding of contemporary issues.

(c) To cater to the felt needs of all sections of society, but specially to the needs of the less privileged and underprivileged sections in order to secure their effective participation in the development process.

The University of North Bengal established the CACE on 3 August with a view to help in promotion of literacy in the northern five districts (presently six districts) of West Bengal. At the initial stage, due to political disturbances in the Darjeeling hill areas, the activities of the CACE began only in the four districts. The centre-based approach of the NAEP was implemented by the CACE through the affiliated colleges of the University. The Colleges organised 'Adult Education Centres (AEC)' in the different places: AECs were generally organised sex-wise, because adult women learners were reluctant to learn with men and also there was a difference in teaching-learning materials. The teaching-learning materials used in the AECs were prepared by the State Resource Centre for Adult Education, West Bengal on the basis of learners' general problems and interests. The Colleges organised majority of the AECs in the rural areas' while a few were also organised in the urban slums.

The activities of the CACE started in the districts of North Bengal in the year 1988-89. Upto 30 June 1992, the CACE organised programmes on centre-based approach through its respective college units. There was UGC sanction for organising 150 AECs per year. During the year 1988-89, 1989-90 and 1990-91 the performances of the CACE were as follows:

| Year    | Rural Areas |        |        |        |          |        | Urban Areas |        |        |        |          |        |
|---------|-------------|--------|--------|--------|----------|--------|-------------|--------|--------|--------|----------|--------|
|         | Male        |        | Female |        | Combined |        | Male        |        | Female |        | Combined |        |
|         | org.        | compl. | org.   | compl. | org.     | compl. | org.        | compl. | org.   | compl. | org.     | compl. |
| 1988-89 | 95          | 94     | 37     | 35     | —        | —      | 06          | 06     | 12     | 12     | —        | —      |
| 1989-99 | 69          | 55     | 74     | 68     | 04       | 04     | —           | —      | —      | —      | —        | —      |
| 1990-91 | 58          | 56     | 44     | 44     | 02       | 02     | —           | —      | 11     | 09     | 03       | 03     |
| Total   | 222         | 205    | 155    | 147    | 06       | 06     | 06          | 06     | 23     | 21     | 03       | 03     |

**Year-wise Number of Learners enrolled and made Literate**

| Year        | Rural Areas |      |        |      |          |      | Urban Areas |      |        |      |          |      |
|-------------|-------------|------|--------|------|----------|------|-------------|------|--------|------|----------|------|
|             | Male        |      | Female |      | Combined |      | Male        |      | Female |      | Combined |      |
|             | En          | Succ | En     | Succ | En       | Succ | En          | Succ | En     | Succ | En       | Succ |
| 1988-89     | 2565        | 1103 | 1019   | 424  | 3884     | 1527 | 208         | 123  | 304    | 166  | 512      | 289  |
| 1989-90     | 2201        | 607  | 2113   | 829  | 4314     | 1436 | -           | -    | -      | -    | -        | -    |
| 1990-91     | 1414        | 573  | 1435   | 636  | 2849     | 1209 | 69          | 27   | 189    | 33   | 258      | 60   |
| Grand Total | 6480        | 2283 | 4567   | 1889 | 11047    | 4172 | 277         | 150  | 493    | 199  | 770      | 349  |

From the above figures it is clear that the success of the programme was not up to the mark. The reasons behind this failure conforms the findings of the national level evaluation of the NEAP.

The programme of Adult Education was reviewed through an Expert Committee constituted by the UGC in 1991-92. The UGC considered the report of the Review Committee and decided to re-organise the programme on the basis of the strategy evolved by the NLM which in effect means that Universities and Colleges should take responsibility for an area for achieving total literacy in a time bound manner and then implement the programme of CE in that area. The revised guidelines for the programme have been formulated by the UGC in 1992. The objective of the Literacy and Continuing Education programme of the UGC through the Universities and Colleges are:<sup>14</sup>

(a) Actively involving teachers and students in the Universities and Colleges in the process of national development through extension programmes for enriching the knowledge and experience of the teachers and students and also for developing the potential of local human resource so that they effectively participate in the development process.

(b) To achieve total literacy in the areas for which the Universities and Colleges assume responsibility.

(c) To increase the knowledge and awareness to improve the functional skills of the local population in areas which affect their course and quality of life.

Keeping in view the above objectives, the CACE of the University of North Bengal organised an experimental TLC at micro level in the four villages of the three districts of North Bengal. In other three districts of North Bengal during that time, TLC activities were in progress. The CACE organised programmes under its direct supervision in two villages of Darjeeling district. Balurghat Mahila Mahavidyalaya (Women's College) of Dakshin Dinajpur district and Islampur College of Uttar Dinajpur district organised TLC in one village each during the year 1993-94.

Besides environment building, a survey was conducted to identify the learners and functionaries in the villages of Balason colony and Lalmon of Darjeeling district, Khidirpur of Dakshin Dinajpur and Ajitbas colony and Farm colony of Uttar Dinajpur. Selected volunteer teachers (VT) and Master Trainers (MT), were oriented for four days. In a mass meeting of the respective areas, TLCs were inaugurated during July 1993 to January 1994.

Efforts for making a fully literate India are in progress but, it is observed that reaching the target is a very difficult task. The TLCs running all over the country, failed to achieve the desired goal within the stipulated time of 200 hours spread over 5-6 months. On the other hand, it can be said that it is not possible to achieve the goal within that time span. In most of the cases of North Bengal it took more than two years for holding the final evaluation of the ZSS. As a result, the cost effectiveness of the programme has come under question. The main thrust of the programme is voluntarism. How can it be possible for an unemployed youth to render voluntary service for more than two years at a stretch having no financial or other kind of assistance? Though the TLC began with great enthusiasm, the same enthusiasm was not found after the starting of teaching-learning process. In most of the cases it became government funded and government controlled programme. The movement was launched, without a mass campaign, as a result, the idea of mass movement was not fulfilled.

## References

1. Ahmad A. and Nuna S.C. (1987); 'Tribal Education – Shadow of an Uncertain Future', Journal of Educational Planning and Administration, New Delhi, 1 (2).
2. National Literacy Mission (1997); 'Concurrent Evaluation of TLC Districts', Directorate of Adult Education (DAE), Ministry of Human Resource Development (MHRD), Department of Education, New Delhi.
3. Tilak, J.B.G. (1986); 'Education in an Unequal World', National Institute of Educational Planning and Administration and Concept Publishing Company, New Delhi.
4. Dr. Nafis Sadik (1992); 'The State of World Population 1992', UNFPA, New York.
5. Biswas A. and Agarwal S.P. (1986); 'Development of Education in India', Concept Publishing Company, New Delhi.
6. 'The Statesman', Tuesday, 7 October 1997.
7. National Institute of Adult Education (1993); 'Statistical Database for Literacy: Final Population and Literacy - 1991', Vol.2, New Delhi.
8. Document issued by Ministry of Human Resource Development, Government of India, New Delhi.
9. 'Revised National Policy on Education'; MHRD (Education), New Delhi, 1992.
10. Directorate of Adult Education; 'Literacy – Facts at a Glance', Ministry of Human Resource Development, Government of India, New Delhi.
11. Ibid 2.
12. University Grants Commission (1982); 'Revised Guidelines on Adult and Continuing Education and Extension', New Delhi.
13. Ibid 7.
14. UGC guidelines for the Programme of Literacy and Continuing Education in Universities and Colleges 1992.
15. Annual Reports (1988-89 to 1996-97) and 'Report of the Evaluation Committee on TLC programme, 1994' of the Centre for Adult and Continuing Education, University of North Bengal.

Tushar Mukherjee

## **District Primary Education Programme – Another Supply Side Gimmick ?**

The Government of India have launched yet another massive programme to bail out Primary Education and ensure its universalisation by the turn of the century. Known as District Primary Education Programme (DPEP), it seeks to develop and implement in the selected districts “a replicable, sustainable and cost effective programme” to

(i) reduce differences in enrolment, dropout and learning achievement among gender and social groups to less than 5%,

(ii) reduce overall primary dropout rates for all students to less than 10%,

(iii) increase average primary learning achievement by 25% over measured base line levels,

(iv) Provide, according to National Norms, access for all children to Primary Education (Class I to V) in formal primary schools wherever possible, or its equivalent non-formal education. Selection of Districts is based on two cardinal considerations, viz.,

(i) Educationally backward districts with female literacy below the national average, and

(ii) Districts where total literacy campaigns have been successful leading to enhanced demand for elementary education.

The Programme has already started in 43 districts of Madhya Pradesh, Orissa, Assam, Haryana, Maharashtra and Karnataka. Five districts of West Bengal, viz., Coochbehar, Murshidabad, Birbhum, South 24 Parganas and Purulia, included in the DPEP agenda have just begun preliminary activities. “While the quantum of funding would depend upon the district plan and its appraisal, the overall investment per district is expected to be of the order of Rupees 30-40 crores..”

The amount of ‘expected’ investment is itself unprecedented even though it has to be spent during the projected life of the programme, which is to last for five to seven years. Moreover, “programme resources are a net addition to the normal growth of state plan allocations for education as a whole”, and specially for primary education. No district in India has perhaps got so much fund to implement a single programme in any field of development.

Activities to be undertaken under this programme include, inter alia,

(i) microplanning and school mapping

(ii) expansion of physical facilities

- (iii) improvement in the existing levels of equipment and teaching-learning aids
- (iv) streamlining the production and distribution of text books
- (v) development of school libraries
- (vi) improvement in the current minimum level of learning and to upgrade it to reach the prescribed norm within a specific time-frame
- (vii) recruitment, training and induction of teachers wherever necessary to meet the existing shortfall with special emphasis on rural areas and recruitment of lady teachers and
- (viii) provision for free textbooks for the focus group of the disadvantaged.

The most interesting feature of the programme is that it is being almost wholly funded by international aid agencies including the World Bank under Social Safety Net related funding, which, as we know, is being mainly used in rejuvenating sick industries by funding their exit policy. In fact, out of an estimated outlay of Rs. 1950 crores during the eighth Five Year Plan, Rs. 1720 crores are proposed to be drawn from this fund. While the DPEP has undoubtedly infused new blood in the hitherto anaemic primary education scenario of the country, and has gladdened the hearts of educational planners and officials, it has raised a storm of debates among educational scholars who have started branding it as another white elephant like its predecessor "Operation Black Board", but with a more sinister design.

Scholars like Prof. Krishna Kumar question the very rationale of tagging primary education with structural adjustment for economic liberalisation and need for seeking funding from "Social Safety Net Adjustment Credit Finance by IDA", unless the objective of DPEP like its industrial counterparts includes "discouraging political turmoil expected as a result of "adjustment". The design of the donor agencies become transparent when one finds that in the name of decentralisation of decision making process the agencies are prescribing pre-fabricated formats for collecting data which would ultimately form the very basis of the programme. The myth that the DPEP is a "bottom up" programme unlike earlier "top-down" prescriptions is immediately broken when the donor agencies prescribe a number of dos and don'ts and insist on a particular model to be followed all over the country in the name of district-specific models. In the words of Prof. Krishna Kumar, "as it happens, district level proposals were written according to the format provided by the donor agencies themselves, and monitoring by foreign experts and consultants continues to be followed as a norm, a little too visibly, under the cover of decentralised planning and self-monitoring. The excess money presents an all too real, and in certain states already manifest, risk of soaking the new panchayatraj to its roots in corruption".

Prof. Vinod Raina who heads a resourceful organisation called EKLAVYA in Bhopal has seen more sinister design behind the exciting facade of DPEP. He says that the real danger of DPEP lies in its capacity to purge the search for alter-

natives in education and “to bring it in line with homogeneous and globalized world propelled by the market”. According to Prof. Krishna Kumar, “the emphasis on psychometric surveys and regular reporting on achievement levels attained by every child is a bit too loud for any one to accept that it reflects a purely pedagogic concern”. Perhaps the real reason, he points out, is that “such data can help in the geographical shaping of foreign investment, specially in the negotiation for investment potential of different regions” of the country.

While we should be concerned over the apprehension aired by two eminent educationists, we need not be too alarmed over the designs of the foreign donors who are really investing a lot of money on DPEP. Our real concern should be on whether the fares recommended by the programme can really ameliorate the conditions of our ailing formal and non-formal primary education system or it would be another gimmick in supply side manoeuvring. To know this, we need to analyse the basic problems of the system as they exist today and to examine how far the prescription of the DPEP can address to those problems.

### **Vulnerable Areas**

There are three vulnerable areas in which the problems of primary education are strongly manifest. They are enrolment and access, retention and wastage, and achievement of the children of 6-11 age group who are the specific clientele of primary education system. Gross enrolment ratio of 97% in primary education as stated in the Human Development Report of the UNDP, reflected in the Statesman on 26-9-98 appears to be an over-estimate, because it did not take into account enrolment of over-aged and under-aged children in primary schools. Since they constitute not less than 20% as mentioned by the Ministry of Human Resource Development, in its country report before the eight-nation EFA Conference in 1993, effective enrolment can not be more than 77%. Prof. Acharyya in his seminal work published in 1994 has also calculated enrolment to be around 79%.

This means that about twenty million children are still out of school. It has also been admitted by the Government of India that majority of these children would never attend a formal school due to various problems of access. According to Prof. Acharyya “Access means liberty to enter and at the same time ability to enter. Universal provision of facilities may ensure liberty to enter but ability to enter will depend on many other factors like socio-economic condition of a learner, educational background of the parents, attitudes, and above all relevance of education imparted in schools to the life situation of the prospective learners”. Dr. Asoke Mitra, in his report of the Education Commission, has mentioned that many parents in rural areas are averse to sending their children to schools on the ground that their services could be more fruitfully utilised at home than at non-functioning schools where the teaching-learning process is the least concern of the teachers. It is also the experience of the experimental educational programme of Ramakrishna

Mission Lokasiksha Parishad, to which we would turn frequently, that children of non-literate parents are discriminated by the teachers forcing them to shun such schools even though they exist in the vicinity. Prof. Amartya Sen, leading a group of scholars, did an in-depth study on the problem of wastage. While depreciating overall role of "internal" factors on enrolment and wastage, the study found that only one internal factor, i.e., timing of rural primary schools to have a considerable bearing on the question of wastage at the primary stage. It was found that a complete lack of synchronisation between agriculture seasonality and the school timing led to sharp fall in attendance during agricultural peak season". Studies made by other scholars have also found adverse effects of school timing on enrolment.

Finally, enrolment statistics doled out by the Government are themselves suspect. According to Prof. P. Acharyya, enrolment figures given by the three agencies viz. HRD Ministry, NCERT and NSSO, who between them regularly monitor enrolment, have provided three totally divergent enrolment figures as in 1986-87. While N.S.S. 42nd round puts the figure at 68 million it was 87 million by the 5th Educational Survey of the NCERT and 90 million mentioned in the selected educational statistics of the HRD Ministry. Such wide divergence occurs mainly due to misreporting by the school authorities who normally like to portray themselves in better light to their higher authorities and thus, save their placement in the face of Government regulations which binds pupil-teacher ratio at 40:1. The Ramakrishna Mission Narendrapur, which has taken up Sonarpur Block near Calcutta as its experimental field for primary education was surprised to find a large number of non-school going children in the 6-11 age group despite the fact that almost every village had a primary school and that officially there was 100% enrolment in the specific age group. Among the non-school going children, working children, girls and muslim children constituted more than 70%. For them the schools were either inhospitable or inconvenient. While conservative muslim families were averse to send their daughters to co-educational environment, parents of working children found educational fares provided irrelevant and unsuitable to their needs and aspirations. Some parents felt that the teaching learning process generally favoured the upper classes and their children were often neglected.

Given the state of enrolment stated in the foregoing analyses one would have expected DPEP to take serious note of this important aspect of Primary Education and initiate imaginative corrective measures in its agenda. But there is not a single line in the published guidelines to suggest that this aspect has at all been considered. It appears that DPEP was taken enrolment or for that matter, demand for education in rural societies for granted and has thus proceeded on increasing the facilities and improving the achievement levels of the enrolled children. While this may theoretically enhance the quality of learning, it would seldom assist in the overall goal of universalisation of education.

### Retention and Wastage

Scholars justifiably attribute more importance to retention than to enrolment because retention not only lends solidity and credibility to enrolment, but it minimises wastage. If a child leaves school after one or two years, he remains non-literate and joins the huge backlog of adult non-literates of the nation after some years. And whatever investment the State has made on him, in the form of teachers' salaries and other incentives like free text-books or mid-day meals, is rendered infructuous. Lack of retention of the enrolled children or the problem of drop-out was one of the major problems facing primary education to-day. Thirty four per cent of drop-out in the primary stage, as reported in the Human Development Report published by the Statesman, appears to be a gross understatement of a much bigger problem. Even if we accept it then net enrolment becomes 63 per cent ( $97\% - 34\% = 63\%$ ) which by itself speaks volumes on the state of primary education. But scholars give much higher drop-out rate. According to the annual report of the HRD Ministry the drop-out rate in classes I-V (Primary Section) was 48.60% in 1990-91. Prof. Acharyya, however, feels that "there is no indication that the situation has improved in a significant way" (since then). In fact, the 6th Educational Survey conducted by the NCERT has seen no significant improvement in the drop-out rate, and even now nearly half of the children leave school before they reach Class IV. Like enrolment data, retention data are also collected from the school authorities and this leaves much scope for fudging for similar reasons. Moreover, "drop-out rates have been calculated by reflecting on the number of children in Class V.....as percentage of enrolment in Class I... This does not take into account the repeaters and the children who enter the system after Class I". This is a statistical faux pas and does not reveal the true picture of retention. The spectre of drop-out and consequent wastage have been haunting the educational planners for the last 10 years and it is reflected in the presentation made by the HRD Ministry before the Planning Commission on the eve of formulation of the 9th Five Year Plan. It says that "the drop-out rate computed at the end of the elementary stage shows that of 100 children who had taken admission in grade I in the year 1986-87, only 40 managed to reach grade VIII in 1993-94 as per data of the 6th (Educational) survey (of the NCERT)".

In spite of overriding concern expressed by all educationists over the problems of retention and wastage in primary education, there is very little serious and systematic effort by the educational planners to find out the cogent reasons of this phenomenon and in recommending appropriate steps to combat this debilitating malaise in the basic education fabric of the country. The National Sample Survey Organisation (NSSO) has made a study of non-enrolment and drop-out during the 42nd round of the National Sample Survey held between the period from July 1986 to June 1987. It reveals that nearly 30% of the respondents both in rural and urban India gave the reasons for "never enrolled" as being "not interested" and of them,

female respondents have been the largest. Similarly, 26.5% rural males and 33.3% rural females gave the same reason for discontinuing the study of their children from primary schools. Another study conducted by the team led by Dr. Amartya Sen is more explicit in finding out the reasons for discontinuation. They found that the level of income and the broad caste composition appear to be the two most dominant factors in explaining retention (1968). Yet another study conducted by Prof. P. Acharyya in 1979-80 found that "educational achievements in terms of literacy, enrolment and retention correspond closely with the hierarchical order of the rural society according to either agrarian, class, caste or income level. The literacy and enrolment rates decline very sharply in accordance with the hierarchical order of the society". Paraphrasing further, it means that the lower the income and caste or class status, the lower will be enrolment, retention and achievement. Ministry of HRD has also admitted in its report to the Planning Commission when it states that "the proportion of currently 'non-enrolled' decreases with the increase in per capita income". Professor N.V. Verghese, an eminent educationist turned strong Government advocate of DPEP, has admitted that "more than three fifths of the non-enrolled in the age group 6-11 in the rural areas and more than four fifths of the non-enrolled in the urban areas are accounted for by the lowest 40% of the population. In other words, the problem of non-enrolment is increasingly getting confined to the backward regions and deprived groups". Ramakrishna Mission Lokasiksha Parishad has made a detailed survey of drop-outs in their experimental block of Sonarpur and has found that 95% of the non-enrolled and dropped out children belong to economically weaker households. Majority of them are working children, girls and members of minority communities.

In the face of such unequivocal and confirmed findings, the DPEP agenda holds very little to address the problems of retention and wastage, and as the proverbial ostrich has feigned blissful silence. They are only interested in reducing differences-in enrolment, drop-out and learning achievements-among gender and social groups to less than 5% without however stating the existing level of differences. This strategy indicates that the goal of universalisation has been jettisoned and that the DPEP has accepted the status quo in all the three above-mentioned parameters of good primary education. The scholar-spokesman of the programme has admitted as much when he declared that "pressure on public policy is to shift investments from programmes to expand access to programmes focusing on quality of education...a shift in emphasis from equity in access to equity in achievement". Presumably, the DPEP succumbed to this so called public pressure without looking back to its implications. Absence of equity in enrolment and retention would render the achievement barren, because there would be none for whom the achievement gap is to be narrowed down. It would once again reaffirm the common critique that the present day primary education system is heavily tilted towards the elite both in rural and in urban areas. In the meantime, wastage would

continue to gnaw at whatever investment we could marshal so far.

### **Learning Achievement**

This is perhaps the only parameter with which we have no quarrel. It is indeed shocking that even in an enlightened state like Kerala having nearly 100% literacy and enrolment, quality of education dispensed by the formal primary school could not ensure more than 56% in reading comprehension and 58% in word comprehension. In seven other states of Haryana, Madhya Pradesh, Orissa, Assam, Tamil Nadu, Maharashtra and Karnataka learning achievements are even poorer. It is only 50% in word comprehension and 39% in reading comprehension in which no district of MP and Tamil Nadu could even score 40%. In mathematics, the scenario is even more bleaker. No district in the above eight states could score more than 46% and no district in six states other than Tamil Nadu and Karnataka, but including Kerala, could achieve more than 40% in mathematics. These are the findings of a study conducted by the NCERT and NIEPA during 1992-93. The record of West Bengal in this sphere is even murkier. In all these cases it has been conclusively shown by numerous studies that it is the economically and socially backward communities who are at the receiving end of the educational discrimination perpetrated by the state primary education systems due to their strong elitist bias.

It would therefore put the cart before the horse if the DPEP day-dreams that its undefined intervention could at one stroke enhance the universal achievement level to 25%. Even if that could happen, it would hardly touch the rural poor and the under-privileged who are still struggling with the twin problems of enrolment and retention. Only if there is special emphasis on the children of rural poor in the entire teaching learning process which takes care of coyness of the children from the non-literate households and their incapacity to stand-up and be counted, some dent can be made in these otherwise bleak ambience of a primary school where these children feel unwelcome and sometimes socially look down upon by the teachers. DPEP has no item in its agenda to address this vital issue.

### **The West Bengal Scenario**

West Bengal is also a leading member of the DPEP family having already launched its programme in five districts of Coochbehar, Murshidabad, Birbhum, South 24 Parganas and Purulia. Although the selected districts are more or less deserving, there are other deserving districts in the state meriting DPEP intervention. None of these districts except Birbhum has a successful Total Literacy Campaign and there are other districts where female literacy rate is low.

The status of primary education in West Bengal is no different from the all India status and the DPEP would have to confront all the problems in the fields of enrolment, retention and achievements stated earlier. According to a report pub-

lished by the Directorate of School Education in West Bengal, in 1994 the gross enrolment ratio was 78.86% and for girl child it was 43.44%. It must have increased by now but the mischief of deliberate misreporting mentioned by different scholars is by no means absent in this state also. Coming back to the study conducted by Prof. P. Acharyya in four villages of West Bengal, he says: "as regards the reason for non-enrolment, 41.11% of the total respondents who had non-enrolled children in the family expressed their lack of interest in education as one of the major reasons for not sending their children to schools. In fact, 15% of them did not get their children enrolled simply because they were unwilling to educate them. Of the total respondents, 32.79% stated that their children were required to work for their family....and 19.44% stated poverty to be a reason". The study conducted by the Ramakrishna Mission Lokasiksha Parishad reveals that 50% of the parents of non-school going children of Sonarpur Block of South 24 Pgs. District feel that no purpose is served by sending their children to the existing primary schools, because the children learn nothing and waste their time while attending schools. The teaching-learning process is hopelessly inadequate and irrelevant. Dr. Ashoke Mitra, who headed the Education Commission set up by the West Bengal Government, confirms this attitude amongst the rural poor parents when he states in his report that "economically hard up parents soon discover that attendance in school for one year-and even two years-has not meant any substantial improvement in the general level of awareness of their children or in the content of their learning. Such a realisation has sometimes led to the decision that it would make better sense to withdraw the children from school and to put them to work in fields and workshops, thereby adding immediately to the household income". This statement holds equally good for non-enrolment as made out by the respondents of Prof. Acharyya.

As regards retention, West Bengal presents the worst scenario. According to the Ashoke Mitra Commission, there is 43.65% drop-out in Class-II, 52.23% in Class-III and 61.85% in Class-IV in relation to the enrolment in Class-I. Added to this, misreporting and number of repeaters in various classes in spite of the "No detention" policy, the drop-out rate is still alarming. Popularity of non-formal education centres run by the Ramakrishna Mission, Narendrapur fully supports this trend.

The achievement status is equally dismal. A study conducted by a group of scholars in Hooghly District of West Bengal on assessment of minimum learning in primary education reveals that out of a minimum expected score of 51, only 24% of the students tested could achieve the minimum score. The interesting derivative feature of the study is the distribution of these students among different categories of schools which shows at once the class composition of the students. "Eighty six per cent of the Government school children, 45% of the urban school children, 29% of the municipal school children and only 20% children from rural

schools achieved the minimum expected score. An elitist bias is thus apparent in primary education. Government schools cater principally to children from economically and culturally advantaged groups who form a class by themselves" Similar result is obtained from another study conducted by the State Council of Educational Research and Training all over West Bengal and found only 19% of the children tested could reach or cross the cut-off mark. Dr. Ashoke Mitra Commission has also has come down heavily on the quality of teaching in primary schools and consequent low level of achievement of the students. According to the report, incidences of non-enrolment and drop-out are directly related to the quality of teaching and level of achievement in primary schools.

Given the background and present status of primary education in West Bengal, a great hope naturally lies in proper implementation of the DPEP in the five districts of the State. The proposed investment of Rs.200 crores in the next five years is also unprecedented and can bring about a revolutionary change in the educational scenario of the State. But would that ever happen? From initial reports the prospect appears to be bleak. During the last three/four years nothing worthwhile has been done to lay a strong and dynamic foundation. The former project director has left exasperated with the political interference of the power that be and the new Director has the requisite drive and imagination to achieve something, provided he is allowed to function independently. Although almost five years have elapsed since the opening of the project office, no official document specifying project objective and strategies of the State has come up before the public eye. Participation in seminars and workshops including frequent foreign trips have been the main activities of the project. According to some reports the external donor agency, being dissatisfied with the progress and administrative set up of this very expensive project, has withheld fund for a long time.

### **Murshidabad District**

All the five districts have already formulated their total plan but have kept them secret. What is available after much persuasion is the annual plan for 1997-98 of Murshidabad District, the most problem-ridden of the five districts. Under the DPEP they have planned to undertake following activities: (i) establishment of project planning and management capability (ii) establishment of capacity for financial planning and management (iii) establishment of capability of teacher training (iv) improving teaching effectiveness (v) mobilising community and forming village education committees (vi) planning and implementing improved arrangement for construction and maintenance of new buildings (vii) creating capacity for action research and carry out action studies and (viii) creating capacity and designing systems for monitoring, evaluation and impact assessment.

In the annual plan for the first year following activities were proposed to be undertaken:

| Sl.No. | Item of work                         | Amount earmarked (in lakhs) |
|--------|--------------------------------------|-----------------------------|
| 1.     | Civil works                          | 251.9                       |
| 2.     | Furniture                            | 22.05                       |
| 3.     | Equipment                            | 13.45                       |
| 4.     | Vehicle                              | 1.2                         |
| 5.     | Books and libraries                  | 0.52                        |
| 6.     | Training                             | 177.11                      |
| 7.     | Salaries of project Staff            | 24.934                      |
| 8.     | Consumables                          | 8.89                        |
| 9.     | Teaching Learning material           | 110.275                     |
| 10.    | Research and Studies                 | 1.00                        |
| 11.    | Equipment, operation and maintenance | 0.20                        |

By all counts it is a pedestrian budget having little relationship with the so-called lofty objectives of DPEP. Bulk of the goes to training and teaching-learning materials as if highly motivated teachers are waiting for good training and attentive students are hankering after quality learning materials. In the whole plan document not a single line has been spared for the relevant concerns on enrolment, retention and achievement. It has neither any component which has come up through participatory discussion with the people who matters and for whose benefit the project has been formulated. Rather it has proudly proclaimed that due consultation has been made with the state level and national level project officers and experts. The document betrays bureaucratic straight jacket and concern of the donor agencies whose format it has religiously followed. In the ultimate analysis it is nothing but continuation of the failed "Operation Black Board" which had also spent millions of rupees in refurbishing school facilities without looking into constraints of human behaviour.

It is quite likely that Rs.40 crores allotted to this district would be spent on constructing school buildings, purchase of office furniture, payment of salaries of the project staff and in holding numerous seminars and workshops participated by the same sets of officials, local elites and party apparatchik.

By placing overriding emphasis on quality, the DPEP authorities throughout the country have discounted equity in access and retention, and has been flaunting improvement in enrolment and retention by fabricating data prepared by consenting and acquiescing scholars and bureaucrats.

In West Bengal the level of manipulation and manouvreing appears to be the highest. Shri Manas Ghosh, correspondent of the Statesman in a report published

on December 2, 1996 had these things to say: "State education department officials are..... sceptical as 'unscientific, unreliable and fudged' methods are being used to prepare baseline survey of the existing primary schools and the achievement level of their students". "A faulty base line survey, the ODA fears, will not reflect ground realities or the achievement level attained by the students when the project is completed after five years". "This will not only make the entire exercise fruitless but the expenditure of Rs.200 crores on the project will be a total waste", a senior official of the primary education department said. While sharing the concern of Shri Ghosh and unnamed officials of the education department, I along with unattached educational thinkers and scholars do believe that the money now being spent on DPEP would be wasted in any way since supply side gimmickry has its limit and that limit has already been crossed with the failure of Operation Black Board.

In West Bengal the basic problems lies in the motivation of the parents of poor families and demotivation of the parents is directly linked to the lack of motivation of the teaching community. The Ashoke Mitra Commission has made a scathing attack on the motivation of the teachers by stating that "the appointed teachers may on paper possess the minimum academic qualification to teach in a primary school; their interest in teaching however be only marginal. This could be for several reasons. The individual appointed as teacher may combine the profession of teaching with a number of other activities.

**Mridula Seth**

## **Education and Skills for Out-of-School Adolescents**

*As we move into the 21st Century and the age of information technology, adolescents who are deprived of education will be at a great disadvantage. When opportunity knocks, adolescents, unable to adjust to new vocations and cope with stresses of modern living, will lag behind. Out-of-school adolescents require good quality, flexible non-formal education equivalent to elementary level. Non-formal education should have a strong component of life skills and education for their overall development, better sexual and reproductive health. Adolescents have diverse needs for which a multi pronged strategy must be evolved. Thus, the need for inter-sectoral networking of services.*

Adolescence is a period of physical, psychological and social maturity from childhood to adulthood extended from the onset of puberty to the attainment of full reproductive maturity. "Adolescence" has been defined as including those between 10 and 19 years of age; "youth" as those between 15 and 24; and "young people" as a term that covers both age groups (WHO/UNFPA/UNICEF Statement, 1989). Early adolescence is a clearly defined stage of development, with its own specific changes and developmental tasks. It begins just prior to the onset of puberty and extends through the early years of adolescence, roughly from the ages of 10 to 14. Because puberty occurs at varying chronological ages and growth rates during this period also vary widely, early adolescence encompasses a wide range of developmental characteristics.

Adolescents represent a major potential human resource for the overall development of a nation, yet due importance has not been given to their overall development. The International Conference on Population and Development (ICPD) held at Cairo in September 1994, recommended among other things, focus on all issues concerning the adolescent in their entirety, and has suggested development of an integrated approach to their health, education and social needs.

In India, there are an estimated 190 million adolescents, comprising one fifth of the population. The official statistics and literature available on adolescents in India is not completely accommodative of the emerging definition of adolescents. In some cases, information regarding the 15-19 age group has to be estimated or disaggregated from the information on the age group of 15-24. Hence, more and better quality data is easily available on the older adolescents, rather than on the younger adolescents (10-14). Adolescents, many of whom are below 14, work in home based occupations, local village industries and in the agricultural sector. In urban areas, girls, forming a large part of the unorganised sector, work as domestic

help. Sex-disaggregated data from the official data collecting machinery is a recent phenomenon.

### **Needs of adolescents**

*In order to understand the needs of adolescents, we need to consider the changes in four major areas of development: physical, intellectual, social and emotional.*

*Physical development:* The 10 to 14-year old adolescents experience more rapid growth and development than at any other stage of life except infancy. Most girls begin their growth spurt around the age of 10, with the most rapid growth occurring between their thirteenth and fourteenth birthdays. Over the last century, the average age of first menstruation has dropped from 17 to 13 years and is still dropping. Boys' growth spurts typically begin around the age of 12 and may continue through their fifteenth birthday or even later. Because of their different rates of maturation boys and girls may not reach equal stages of development until the age of 16. Many adolescents experience a great deal of anxiety as they compare their physical development to that of their peers. Just when sameness is their goal, variation is the norm.

*Intellectual development:* Adolescents between the ages of 10-12 gradually learn to substitute words and ideas for concrete props. They become more flexible, abstract thinkers. Although most young adolescents are able to cope with abstract materials, some may need to be taught the necessary language skills and thought processes. Many levels of thinking may be represented within the same age group.

*Social development:* Forming friendships and belonging to peer groups is an essential developmental task. During early adolescence, friends are usually of the same sex but gradually they start becoming interested in the opposite sex. They tend to become more self-reliant and want less parental control. Although peer influence increases at this age, they do need continued guidance and emotional support from their parents and other adults.

*Emotional development:* Young adolescents undergo numerous changes and conflicts resulting in emotional ups and downs. They need to learn to manage the emotional changes to avoid unnecessary suffering.

Following are some feelings adolescents find difficult to handle and require skills to cope with them:

\* *Anger* – young people tend to lose their tempers, and sometimes even become violent. They need to learn to express anger safely and appropriately.

\* *Fear and anxiety* – facing unknown situations raises concern, fear and anxiety. Coping with anxiety requires a supportive environment and self-confidence which can be built over a period of time.

\* *Shyness* – adolescents often feel shy to express themselves and take advantage of opportunities available. To overcome shyness, they need encouragement

and opportunities to be involved in group activities.

\* *Grief* – sensitive adolescents find it very hard to overcome grief. They may become introverts and unable to share intense feelings with others. They need to learn to express deep feelings of sadness or disappointment in a supportive environment.

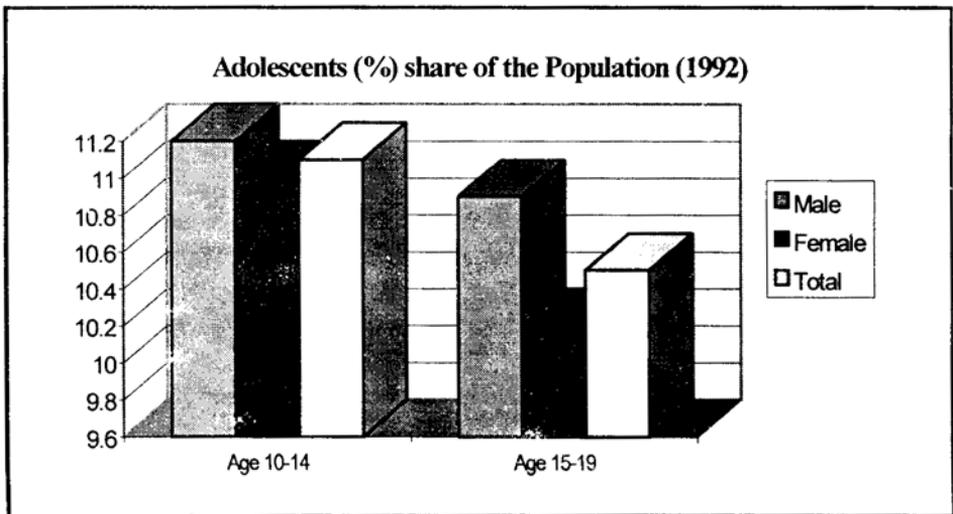
\* *Guilt* – adolescence is a period of learning, adventure and taking risks. Very often mistakes made lead to the feeling of guilt which can have negative consequences. Adolescents need to learn to regard mistakes as learning opportunities.

**Education of the adolescents**

Education of adolescents is a critical factor in itself and it also affects health, fertility, and overall development. Studies suggest that indicators of social development such as, lower fertility, lower infant and child mortality rates, lower population growth, higher age at marriage, higher life expectancy and greater participation in work force are highly correlated to the levels of education.

*Literacy among the adolescents*

The levels of literacy in India among the adolescents is steadily increasing as shown in the chart below. However, there are a large number of children in the age group 6-14 who are not enrolled in school and therefore, deprived of basic educational opportunities. Many of them are already working in various occupations in order to help support their families. These adolescents need to be reached out through non-formal education.



Sources: Registrar General, India, 1993. SRS: Fertility and Mortality indicators, 1992, Fertility and Mortality (SRS) Survey Division, GOI, New Delhi 1992

*Elementary education*

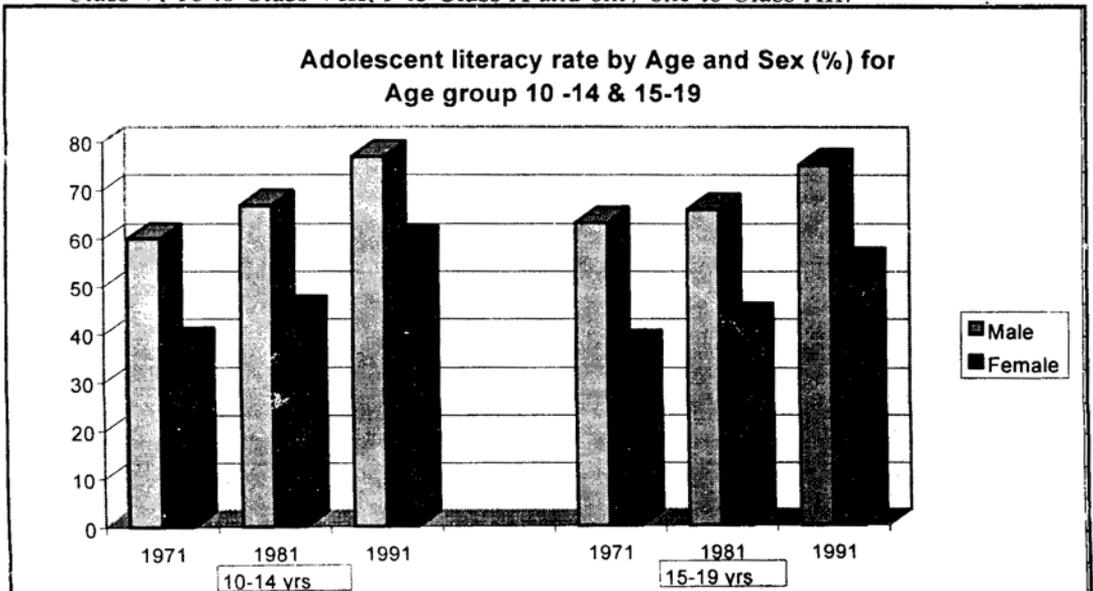
The constitutional commitment (Article 45) to provide free and compulsory education to all children up to the age of fourteen within ten years of its promulgation, remains, unfulfilled. The 8th Five Year Plan envisaged Universalisation of Elementary Education (UEE) to mean: a) universalising access; b) retention; and c) achievement.

*Expanding access*

There is improvement in the access to primary education but the school enrolment levels show considerable divergence between boys and girls, with girls significantly lagging behind. This is largely on account of the inability of the system to enrol and retain girls. The enrolment ratio has gone upto 116.61% for boys but is only 88.09% for girls. At the upper primary level, girls' enrolment ratio is only 47.4% compared to 74.19% for boys (1991-92 Departmental Statistics). Rural urban divide is the sharpest among girls at school stage and higher education is purely an urban phenomenon.

*Retention*

The drop out rates have been uniformly decreasing for both boys and girls. However, the majority of children who leave school without completing the primary cycle are girls. Among girls, drop out rates are much higher among the schedule caste and schedule tribes who are economically and educationally the most disadvantaged in our population. A large proportion of adolescents have never been to schools or drop out without completing primary education. A rough measure of retention is enrolment in Classes V, VIII, X and XII as percentage of Class I enrolment at any given point of time. Among rural girls, barely 40 make it to Class V, 18 to Class VIII, 9 to Class X and only one to Class XII.



Source: Registrar General, India

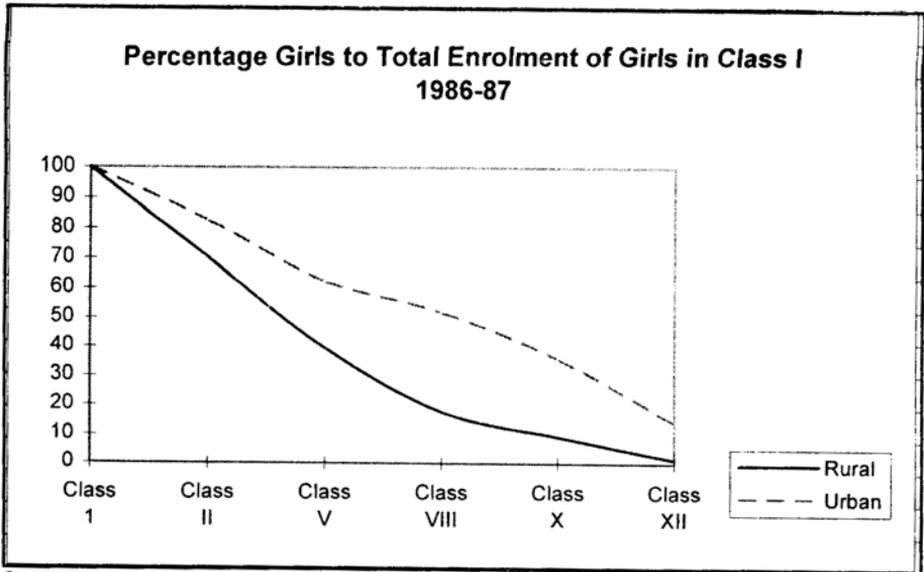
*Achievement*

One of the important goals of UEE has been to improve learning achievement of children both in primary and upper primary classes. The major thrust to achieve this was intended through the programme of Minimum Levels of Learning (MLL) introduced in most States. MLL implies quality with equity. Empowerment is brought about by attainment of competencies at the level of quality which implies attainment of the competencies at the level of mastery by all the learners (equity). Equity, thus, means universalisation of quality. The essentials of MLL programme include: clear concept of MLL, competency based teaching-learning; promotion of group learning; reduction in teacher-dominated learning; enhancement of self-learning; continuous comprehensive evaluation; remedial teaching; emphasis on activity-based teaching; and joyful learning. MLL has so far been introduced for primary level and efforts are being made to prepare MLLs for upper primary schools also. The MLL outcomes are common to both school and NFE programme.

The NFE programme has not emerged as a credible alternative to the formal education system, specially for the upper primary level. This is primarily because of insufficient funding, inappropriate organisational structures, inefficient operationalisation, inadequate involvement of local community and unrealistic expectations by working children through part-time instruction imparted by under-equipped and low paid para teachers. Development of appropriate curricula as well as suitable teaching learning materials for the NFE clientele and recurring training of instructors/supervisors have not received adequate attention. MLL-based local specific curriculum for NFE learners has not been developed in most of the States/UTs.

*Lessons learnt*

Elementary education, especially universalisation of free and compulsory education up to the age of 14, received a high priority in the Eighth Plan. The major effort was in the direction of reducing the disparities that existed among States and within States, between boys and girls and among different segments of the population in access and in improving the retention and achievement of children. A major effort was to provide alternative channels for the education of the deprived sections and working children who, for various reasons, could not enrol and stay for full period in full-time schools. A number of innovative programmes were implemented to improve the management of schools, with emphasis on the involvement of people and voluntary organisations. Schemes like Lok Jumbish and Shiksha Karmi with financial assistance from Swedish International Development Authority (SIDA) were implemented by non-government organisations and the Government of India.



Source: Usha Nayar, *Universalisation of Primary Education of Rural Girls*, NCERT, 1993

Gaining from the experience of running the NFE programme in the country for the last two decades, some of the strategies that need to be adopted for revitalisation and expansion of NFE in the 9th Five Year Plan specially for adolescents may include:

- \* Efforts for better advocacy and awareness of NFE. Changing the perception of NFE as an inferior system of education.
- \* Revamping of organisational structure of NFE at the National, State, District and Project levels so as to provide for greater professionalism, autonomy and space.
- \* Consolidation of existing programme and limited expansion so as to improve efficiency and quality.
- \* Exploring the possibility of providing relevant vocational inputs in collaboration with experienced NGOs and Shramik Vidyapeeths.
- \* Forging of effective partnership with NGOs, Panchayati Raj institutions and the local community for decentralised planning and management of NFE.
- \* Development of necessary linkages with the Open School system and continuing education programmes to upgrade the knowledge and skills of NFE instructors.
- \* Development of self learning materials for the learners.
- \* Improving the conceptualisation base of enrolment data for reliable information. NER should replace GER.
- \* Disaggregated data mapping procedures in order to reduce discriminatory and ineffective practices at district and sub-district levels and to support the trend of greater local level accountability and planning.
- \* Qualitative indicators to supplement demographic data.

\* Too few women graduates from secondary schools to form an adequate pool of women teachers. Good female role models as teachers can make a difference to whether parents will allow their daughters to go to school and to girls' decision on whether to stay and continue at school.

\* For promoting education of girls, addressing options such as: operating home schools; flexible school hours; training young women to be para teachers; encouraging removal of gender bias from teaching and books; and encouraging women to take active roles in school management and governance; bicycles for girls completing primary school for attending middle/high school; nutrition.

\* Assistance to academic institutions and voluntary agencies for taking up innovative projects and research and evaluation activities in the field of non-formal education on 100% basis.

\* Strengthening support services like Anganwadis and Balwadis by establishing linkages with other departments like Women and Child Development, Social Welfare, Tribal Development etc.

\* Health and nutrition during adolescence influence school attendance and achievement. 'Education for all' cannot be achieved without 'health for all' and 'work for all'.

### **Skills for adolescents**

#### *Values for adolescents*

Skills for adolescents should incorporate a set of values with the programme developers believe to be important for the healthy growth of young people. Although these values are not taught explicitly they provide a moral and ethical framework for the programme. These include the following:

- \* Self discipline
- \* Respect and concern for others
- \* Good judgement
- \* Responsibility
- \* Honesty
- \* Family cohesion
- \* Trustworthiness
- \* Involvement in one's family, community

For adolescents to demonstrate positive social behaviour and develop commitments to family, friends, and the community at large, certain external and internal conditions are needed. External and internal conditions leading to positive social behaviour, commitment and bonding with family and community need to be identified (Lions Quest, 1988).

#### *Conditions for skill development*

\* *External conditions* for skill development are related to the environment skill instruction, and information. The environment must provide opportunities, be

warm and caring, predictable, consistent and safe. Skill instructions refer to the enhancement of *thinking and social skills*. Adolescents need information in order to practice skills and make wise, healthy decisions.

\* *Internal conditions* of adolescents that influence their behaviour are : self perception, motivation, and cognition. Self perception is the perception of oneself as capable, worthy and in control of situations. Motivations of young people are influenced by the needs, interests and relevance of activities planned for and by them. Cognition is an important factor for information gathering and critical thinking. Memory, understanding and reasoning determine not only individual perspective, but also contribute towards development of social understanding and “prosocial” behaviour.

#### *Thinking skills*

Thinking skills include: a) problem solving, b) thinking critically, c) making decisions and d) setting goals. Decision making is the crux of managing resources. Information is important for making informed choices; therefore, any intervention programme for adolescents should be based on providing information and education which is relevant, timely, comprehensible and given in a form that is interesting to them. When faced with day to day problems, adolescents need to face challenges boldly. The skills to think critically can be developed by providing opportunities and making them realise the consequences of hasty, unplanned decisions. Adolescents are dreamers. They need to translate their dreams into realistic goals which can provide direction. Setting goals based on assessment of their strengths, weaknesses, opportunities and threats requires guidance and role models.

#### *Social skills*

Social skills include: a) appreciating/validating others, b) building positive relationships with friends and family, c) listening and communicating effectively, d) taking responsibility, and e) coping with stress. Social skills enable adolescents to be accepted in society and to accept social norms which provide the foundation for adult social behaviour. Due to generation gap, there are conflicts which can be resolved amicably.

#### *Negotiating skills*

Adolescents need to learn to be assertive including learning to say “no” to drug use and other harmful behaviour. Assertiveness without aggressiveness is a skill which in the long run is of immense value to the adolescents in negotiating various aspects of personal and social interests.

### **Moving into action**

The overall development of adolescents requires interventions by youth friendly adults who have faith in the adolescents’ capability to shape their own future. Involvement of adolescents themselves in the entire process ensures that their needs are met and skills developed for future participation in governance at

different levels.

The following factors have programme implications for the physical, mental, emotional and social development of adolescents:

- \* Adolescents - their age, sex ratio, educational status, family economic status, nutritional status, work force participation, information seeking pattern; sexual behaviour, self perceptions.
- \* Adults - parents, teachers, opinion leaders.
- \* Services available (access and quality) – education (formal/non-formal), health and counselling, vocational, recreational (games, cinema, library etc), sibling care; policy/legislation, information.
- \* Socio-cultural milieu - values, societal norms, family structure, role models, youth groups/organisations.

Key issues and programme implications:

**Adolescents**

*Key issues*

- \* Composition of adolescents in the community in terms of numbers, sex ratio.
- \* Educational status: access, retention, achievement.
- \* Family economic status
- \* Nutritional status
- \* Work force participation
- \* Information seeking pattern
- \* Sexual behaviour
- \* Self perceptions

*Programme implications*

- \* Need and scope for organising separate programmes for adolescents.
- \* Creating supportive environment for education; alternative systems of education.
- \* Need for financial incentives and support for sustaining motivation of the adolescents/ families.
- \* Need for dietary supplementation and nutrition education.
- \* Involvement of employers, NGOs for work site enrichment programmes.
- \* Use of acceptable channels of communication.
- \* Need for data base; counselling and services to meet the needs of adolescents.
- \* Need for leadership training and building of self esteem.

**Adults**

*Key issues*

- \* Parental relationships and comfort level related to communication of sensitive messages.

*Programme implications*

- \* Sensitisation and education of parents.

- \* Attitudes, competencies and communication skills of teachers/workers especially for transacting sensitive issues.
- \* Attitude and influence of opinion leaders and policy makers.

**Services**

*Key issues*

- \* Access and quality of formal and non-formal education.
- \* Health and counselling services available.
- \* Vocational education and income generation activities.
- \* Recreational opportunities
- \* Sibling care
- \* Policy/ legislation affecting adolescents eg., age at marriage, dowry, MTP, reservation for girls/SC/STs.
- \* Information channels and use of media for education of adolescents.

**Socio-cultural milieu**

*Key issues*

- \* Values providing moral and ethical framework
- \* Societal norms

- \* Capacity building of teachers/workers; Training content and methodology for communication of sensitive issues.

- \* Sensitisation of opinion leaders/policy makers.

*Programme implications*

- \* Strengthening of alternative system of education; establishing linkages between formal and non-formal education
- \* Increasing awareness among adolescents; promoting inter-sectoral linkages.
- \* Strengthening social and thinking skills through vocational courses.
- \* Tapping folk media, games, cinema, libraries etc., for disseminating messages.
- \* Providing day care services to free adolescents to pursue education.
- \* Legal literacy to create awareness among the adolescents.
- \* Effective use of media for and by the adolescents.

*Programme implications*

- \* Activities to bring about social change considering existing values.
- \* Advocacy important for radical change in societal norms.

\* Role models

\* Involvement of adult role models (leaders, social workers, professionals) for promoting activities.

\* Youth groups

\* Activating/strengthening youth groups.

Adolescents need to learn to accept responsibilities by making and keeping commitments, acting with integrity and honesty. They have to develop a positive attitude towards life and view challenges as opportunities. Adults need to appreciate and understand that adolescents are curious, courageous, risk taking and friendly. Building their trust should be the foundation of a healthy relationship with them.

**a message for adults**

Listen

Learn

to their voices

from them

their dreams

their youthful buoyancy

their aspirations

their zest for life

problems

trust in others.....

their frustrations....

**Learn to listen**

**Lisen to learn**

**Listen to learn, Learn to listen**

**References**

- \* Lions Clubs International and Quest International, Lions Quest in India Foundation Manual "Skills for adolescence". Mumbai, 1988.
- \* MHRD, GOI. Report of the working group on Elementary Education, Non-formal education, Early Childhood education and Teacher education for the Ninth Five Year Plan. 1996.
- \* Nayar, Usha. Universalisation of Primary Education of Rural Girls, NCERT, New Delhi. 1993.
- \* UNFPA. India Country Paper. South Asia Conference on the Adolescent. New Delhi 21-23 July, 1998.
- \* UNICEF, Atlas of South Asian Children and Women, 1996.

A. Mahanta  
I. Dutta

## **Retention of literacy skills by the neo-literates of the Sipajhar block of Darrang District, Assam**

Retention of literacy skills by the neo-literates is by far one of the less focussed but major problem areas of the total literacy campaign. The issue of retention of literacy skills is crucial, for it is not actually the number of primer III completers that really matters but rather what they learn, retain and apply as literacy skills. During the basic literacy stage, certain skills (reading, writing and computational) would have been acquired by those who completed the primer III but these may be considered rudimentary which would need to be sharpened and refined while some other skills may have to be acquired afresh or upgraded to usable levels. Retention would be possible only when the levels acquired are sufficiently high not to permit relapse into illiteracy. Moreover, to strengthen literacy and functional skill, their regular application in a living and working situation is essential.

The present study attempted to find whether the neo-literates of Sipajhar area of Assam had retained whatever skills they had acquired in the form of reading, writing and numeracy.

The present study was conducted in the five villages of Devananda Panchayat of Sipajhar block which falls under the Darrang district of Assam. The universe of study comprises 76 neo-literates from five villages namely, Nij-Sipajhar, Nij-sipajhar pub, Devananda satra, Borasuba and Borsola. The characteristics of the neo-literates under study are depicted through the figures below:

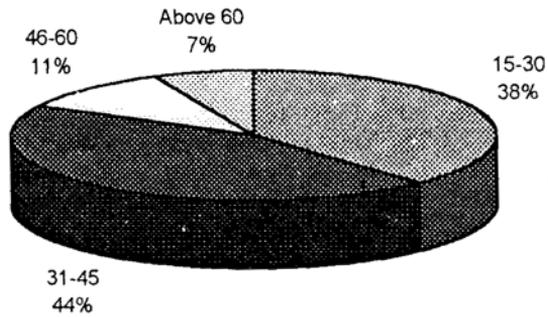
### **Objectives**

The objectives of the present study were formulated after reviewing the available literature, as follows:

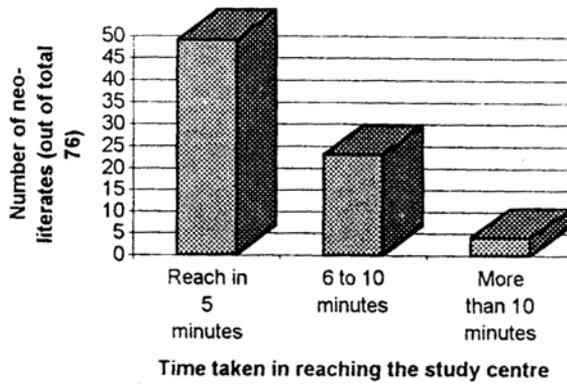
#### **General objectives**

- 1) To test the level of retention of literacy skills amongst the neo-literates;
- 2) To study the nature and extent of use of the literacy skills by the neo-literates; and
- 3) To understand the different situational factors leading to retention or lapse in retention of literacy skills.

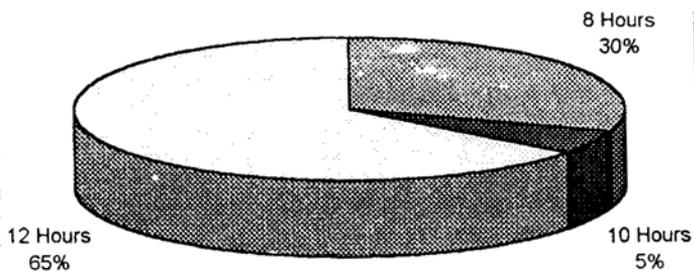
**Distribution of the neo-literates (total 76) according to age group in years**



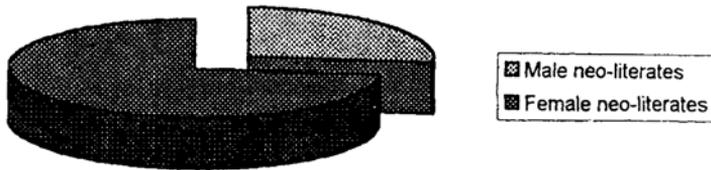
**Time needed by the neo-literates to reach the study centre**



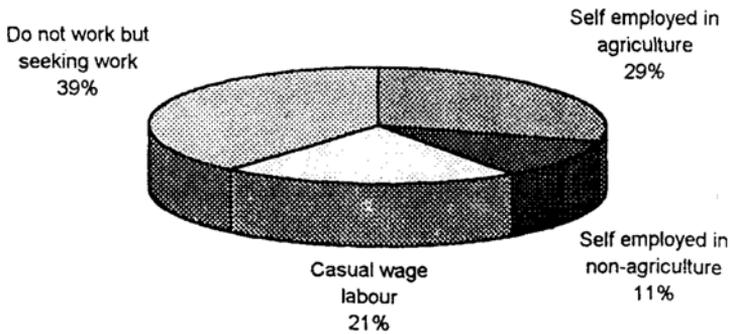
**Hours of works of the neo-literates in a day**



**Sex-wise breakdown of population. Male : 20 (26%), Female : 56 (74%)**



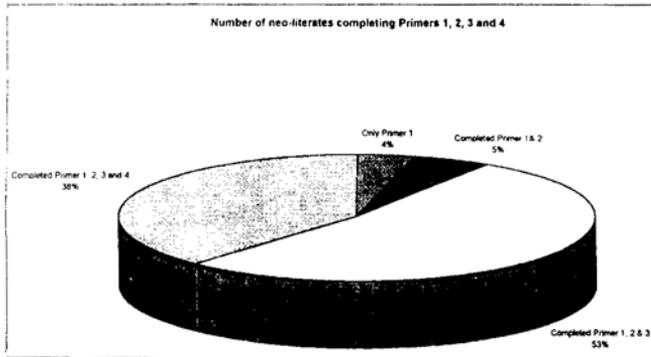
**Employment status of the neo-literates**



**Specific objectives**

The study tried to answer the following specific questions:

- 1) Is there any difference in retention of literacy skills between male and female neo-literates?
- 2) Is there any difference in retention of literacy skills between married and unmarried neo-literates?
- 3) Does the age factor of the neo-literates play any role in retention of literacy skills?
- 4) Does hours of work play any role in retention of literacy skills? and
- 5) Is there any relationship between the number of literates in the family and level of retention of literacy skills of the neo-literates?



**Methodology**

Field survey was carried out in the Devananda Panchayat of Sipajhar block. A test similar to the 1994 external evaluation test was conducted. The target learners were those who had completed at least the primer III.

Literacy tests on Reading, Writing and Numeracy had been separately conducted to test whether the learners could put into application the literacy skills acquired so far. For this, road signs, poster and neo-literate newspaper were given to test the reading skill, simple proforma was given to check the writing skill and grocery list was given to test the numeracy skill of the neo literates. Marks were given according to the number of items or words used correctly.

Questionnaires for the neo-literates and the volunteer instructors were prepared separately to gather additional information, which might, directly or indirectly, have a bearing on retention or lapse in retention. For the neo-literates, questions asked were mainly close-ended ones whereas for the volunteer instructors most of the questions were open ended.

**Sampling procedure**

Non-probability sampling method was adopted for this study. Although, all the neo-literates in the study area had been previously informed about the test, exact turnout of neo-literates could not be ascertained beforehand. Hence, it was decided that whoever came for the test, would be allowed to appear. Apart from that, the number of neo-literates who had completed the primer III during 1994 evaluation was not very large. So it was decided that all the available neo-literates would be permitted to take the test. Eventually the turn-out was on a low key and a total number of 76 learners from five villages appeared in the test. Considering the small number, all the seventysix learners were taken as a single group for the purpose of analyses of the results and no village-wise break upm was done.

**Statistical techniques**

For quantitative analysis of questionnaires, data were systematically arranged, codified and analysed by means of the SPSS (Statistical Packages for Social Science) software to get correlation, standard deviation, mean deviation, variance and t test values of significance for the variables under study.

For qualitative analysis of some open ended questions put to the volunteers instructors and neo-literates, data matrix display chart was used.

**Relevant literature**

Existing literature and research report specifically on retention of literacy skills of neo-literates were found to be negligible. However, during the course of the study, several reports and journals published by the NLM were consulted. These are listed in the reference.

**Major findings and recommendations**

Following are some of the important findings of the study derived from analysis and observation of the universe of study.

1. The test scores of the present (1998) evaluation is found to be highly satisfactory. Out of the 76 learners, 13 scored 100%, while 26 scored 95% and above. Only 7 neo-literates scored below 75%.
2. Out of the 76 learners tested, 66 learners have reached the prescribed norms of NLM which accounts for nearly 87%. The other learners have fallen short of the prescribed norms of obtaining a minimum of 50 marks in each dimension of literacy (3 Rs) and a minimum of 70 marks on the whole.
3. The mean achievement score of learners in reading, writing and numeracy is 28.25, 26 and 25.4 respectively, as against the maximum score of 40, 30 and 30.
4. The mean achievement scores of male and female learners in the 3 Rs are as follows:

| Category | Reading | Writing | Numeracy | Total mean scores |
|----------|---------|---------|----------|-------------------|
| Male     | 37.7    | 23.7    | 27.1     | 88.5              |
| Female   | 37.6    | 26.8    | 24.1     | 88.5              |

As can be seen the total mean score is found to be equal for both male and female learners. However, in writing, the mean score for female is higher, whereas in numeracy, male learners faired better.

5. There is a marked difference in the performance of learners of the age groups of 15 to 30 years and 46 to 60 years, as the mean achievement scores of the two groups are 89 and 95 respectively. Learners of adult age group scored higher than the younger age group.
6. The mean test score of primer I and primer III completers is found to be

;

nearing equal ( $t = 99$ ).

7. The mean test score of the learners, who work for longer hours is found to be higher. This may be because most of the learners who work for longer periods are women. Although the women remain busy for the whole day in household chores, weaving, bamboo-works and other activities, are physically not as exhausted as their male counterparts, who after commuting to the field and working under the scorching sun, get physically drained by the time they reach home and their mental set up for study no longer exists.
8. The literacy test reveals that out of 76 neo-literates, 36 scored 100%, and 20 scored 90% and above.
9. In all the villages, more than 50% learners are found to be deficient in their knowledge about measurement of weight.
10. The mean score of learners in the literacy test is 55 (out of a total score of 63) which can be considered as significantly high.
11. The findings regarding the use of literacy skills in relation to different variables are shown in the figures below:
12. Number of learners in different range of test scores are as follows:

**Table: Number of total learners in different range of test scores**

| Score range | Numbers of learners | Percentage |
|-------------|---------------------|------------|
| 0 - 49      | 3                   | 4          |
| 50 - 59     | 0                   | 0          |
| 60 - 69     | 3                   | 4          |
| 70 - 79     | 7                   | 9          |
| 80 - 89     | 6                   | 8          |
| 90 - 100    | 57                  | 75         |
| Total       | 76                  | 100        |

The above table shows that out of the total of 76 learners who were tested, 92 per cent could attain the **NLM** norm and scored 70% and above. However, 4% of the learners have still a long way to go to reach the norm. Their scores are too low than the cut-off score of 70% of the total. Four per cent of them have to just put a little more effort to come out of the non-literate category. Altogether 92% have achieved their immediate goal and now they can join the post-literacy programme.

### **Recommendations**

1. There is considerable scope for improvement of the literacy skills of the neo-literates, particularly their computational skill, which can be strengthened by conducting periodic literacy competitions, literacy race, quiz etc., and also through evaluation tests. Constant practice is essential to enhance and retain a specific

skill.

2. Although the evaluation test showed excellent performance by the learners, relapse cannot still be ruled out considering the fragile literacy factor. Along with the creation of appropriate literacy environment, improving the functionality of the neo-literates in relation to banking, co-operatives, postal transactions, public distribution system etc., can help in sustaining the literacy skills by constant usage.

3. The volunteers should be infused and reinforced with an increased sense of commitment and enthusiasm through periodic meetings and camps. Since volunteers are the single most important factor affecting the success of the Total Literacy Campaigns, their zeal and commitment should be revived periodically by way of reinforcing the ideals of the mission, through more innovative efforts.

4. Reading hindrance at home is attributed mostly to non-availability or shortage of kerosene. This problem should be looked into in proper perspective, since evenings are comparatively idle in the villages and this is the time when many neo-literates find time to study, after the day's hard work.

5. It has been found that many of the villagers suffer from eye ailments. This makes reading extremely difficult despite their interests. This calls for detailed survey of each TLC village to ascertain the number of learners with eye ailment and the nature of ailments. The next step would be to seek support from government health departments or other agencies engaged in primary health care for remedial action. Mobile eye testing units and spectacle providing vans should systematically visit the TLC districts. This, apart from solving some other health problems, would give a positive boost to the whole programme.

6. The problem of lack of subscription for the neo-literate newspaper has to be addressed. The volunteer instructors should be sensitised regarding the importance of impressing upon the neo-literates to subscribe to the "Gyan Vigyan Barta" in order to sustain their reading habits. For this, rules should be made for the Block Co-ordinators to submit detailed reports about the availability of the newspaper and other neo-literate reading materials, and the reasons for non availability or non-subscription. Where there is shortage of supply, regular flow of the newspaper should be ensured. If the problem is lack of subscription, alternative ways are to be explored.

### References

1. **Ahmed, Mushtaq, 1993.** How to evaluate learning outcomes of total literacy campaigns, Directorate of Adult Education, Ministry of Human Resource Development, Department of Education, Government of India, New Delhi-11.
2. **Athreya, Venkatesh B., 1996.** Literacy and Empowerment, Sage Publications, New Delhi-48.
3. **Emerging concepts in post-literacy : Section 1,** Bharat Gyan Vigyan Samithi, New Delhi, 1993.
4. **Evaluation of post-literacy and continuing education programme,** Report based

- on a workshop conducted at Indore, National Literacy Mission, Directorate of Adult Education, Government of India, New Delhi, 1995.
5. **Ghosh, Arun et al., 1994**, Evaluation of literacy campaign in India, Report of expert group, National Literacy Mission, Directorate of Adult Education, Ministry of Human Resource Development, Department of Education, New Delhi-11.
  6. **Grey areas in post literacy** : Section 2, Bharat Gyan Vigyan Samithi, New Delhi, 1993.
  7. **Handbook for Developing IPCL Material**, State Resource Centre, Jamia Millia Islamia, New Delhi, 1993.
  8. **Maruthi, N.S., and T. Venkatesha. (1996)** Integration of development programmes in post literacy and continuing education: A study, Research unit (SRC) Karnataka State Adult Education Council.
  9. **Post-Literacy Notes Section III** (Module - 1, 2, 3, 4), published by Bharat Gyan Vigyan Samithi, New Delhi-17, 1993.
  10. **Strategies for post-literacy**, National Literacy Mission, Directorate of Adult Education, Government of India, New Delhi, 1996.

**Radhanath Rath**

## **People's Commission for Universalisation of Primary Education**

It is high time, that people belonging to all walks of life – parents, teachers, retired senior citizens, men and women of all categories, officials and non-officials, rural as well as urban inhabitants, students, activists of all voluntary organisations, politicians and trade unionists, teachers organisations, Mahila Samities, and Gram Panchayats as well as municipality and government agencies, should come forward and march ahead with a resolute determination for universalising primary education. It is no use wasting time apportioning blame for different agencies responsible so far for early education. Now it is time that all should come together to materialize this national dream of far reaching social and cultural consequences.

It is certainly necessary to provide one room for each class to provide better teaching-learning situation, but it is not possible to wait till all primary school classes have separate rooms for quality education. That should no doubt be our ultimate objective, but the nation can not wait indefinitely for fulfilling this desirable objective. Now we may have to educate our children in double shifts in existing school rooms, in temporary sheds, in open verandahs, and even under a tree, but we must bring all children to school and keep them there for at least five to seven years. This would be our national call. This emergency measure would create urgent demand for building adequate number of class rooms for all. Voluntary agencies, Government Departments and inspired public would surely come forward to provide buildings for our children.

For a successful teaching-learning programme for young children one teacher for each class is absolutely necessary. But should we wait till full teaching staff is provided by the government? That would take time, but we have to time to waste further. As it is considered a national emergency, volunteers are needed to take up this challenge till adequate number of teachers are appointed. Retired teachers, senior citizens, unemployed educated youth, housewives and all other people who can spare some time for this noble national cause are urged to accept this great challenge and volunteer their services for teaching young children, the future citizens of our country. This would create a great national awareness for education and social welfare in the country. This would certainly necessitate urgent demand for appointment of adequate number of teachers.

Quite a few children, particularly girls of school going age are given the

responsibility of looking after other young children at home. In order to bring them to school the Anganwadies should be strengthened so that they can look after all kids of the locality before the age of six. This system will also create the habit of school entering behaviour in young children. Anganwadies should be actively supported and assisted by mothers of the locality.

Voluntary organisations, school inspecting staff, university students and teachers, training colleges and schools could organise innovative and demonstrative training programmes for qualitative improvement of teaching-learning processes involved in early education. A lot of knowledge in this regard is already available in the country. This should be properly utilised. There is no time to continue stereotyped seminars which are uninspiring and unproductive.

Starting with village and Mahila Education Committees at the lowest level, hierarchical administrative and supervisory bodies should be set up to sustain and strengthen the process of universal educational system in the whole country. One unified and accountable administrative set up is considered absolutely necessary.

Post-Literacy activities, People's Science Movement network and all other developmental processes should be integrated with mass educational campaign. Scientific exposure for all and continuing education for the adults as well as productive activism would provide self reinforcing and self sustaining infrastructural support base for this great all round national movement. This would also encourage children to continue schooling at least for five to seven years. Constant attempt has to be made to stop stagnation and dropout.

The primary school should be made the main cultural centre of the area. It should be the most beautiful place in the whole locality, surrounded by attractive flower and fruit trees. People, as well as children, should be proud of the school for its natural and cultural excellence.

In other words, let people's whole hearted support and efforts create an all round cultural renaissance in the country. No government, however powerful it may be, can really bring about such a cultural revolution of far reaching consequences. It is the people who are capable of achieving this grand national dream. So let us organise ourselves to take irrevocable decisive step in regenerating a new history. Succeed we must, when people become aware of a great dream which will uplift them to a great cultural height, nothing can prevent them in achieving it. We have not yet forgotten that this was our glorious cultural heritage. It has merely been clouded and depressed by all kinds of exploiters in the past. This country must rise and rise it must, otherwise it will be effaced from the pages of civilised human history. Education is the most powerful first step in this direction.

Arise and awake, we will inherit the 21st Century with an ELAN VITAL as vibrant and as vigorous as our cultural past.

R.S. Kumar

## **Literacy and Population Policy A Comparative Study of China and India**

Literacy and education are essential preconditions of accelerated economic development as it has been realised that human resource development (HRD) holds the key for attainment of social and economic goals which cannot be achieved by investment in physical resources alone. China made exemplary efforts to attain high a rate of literacy in the last decade and a half with special emphasis on female literacy which has made the complementary policy of one child norm per family a success. My recent visit to China in December 1997, gave me clear insight into the complementarity of population policy and literacy. We cannot achieve cent per cent literacy without having simultaneous efforts to control out population. They are intimately interlinked and there is a need to have integrated policy if we want to achieve success in this regard.

### **Comparision**

China had 90% of its population illiterate in 1949 and India had a similar situation in 1947. In 44 years, India has attained the literacy rate of 52% (Census 1991) where as China had attained 88% literacy in the corresponding period of 46 years (1949-1995). The figures of literacy in China as in 1982 and in 1995 for various age groups are given below:

**Table - 1**  
**Literacy Position of China for Various Age Groups in 1982 and 1995**

| <i>Year</i> | <i>Total Population</i> | <i>Age 15+</i> | <i>Age 15-45</i> |
|-------------|-------------------------|----------------|------------------|
| 1982        | 73.23%                  | 65.51%         | 79.44%           |
| 1995        | 87.99%                  | 83.52%         | 93.86%           |

The absolute number of illiterates of the age above 15 is estimated to be 149 million (though as per Unesco estimates it is 166 million), and out of them 72% (about 108 million) are women though overall literacy rate for women is 76%. The comparative position of literacy in India and China is given below:

**Table - 2**  
**Position of Illiteracy in China and India as in 1980 and 1995 (Age above 15)**

| <i>Illiteracy<br/>in Country</i> | <i>1980</i> |          |          | <i>1995</i> |          |          |
|----------------------------------|-------------|----------|----------|-------------|----------|----------|
|                                  | <i>MF</i>   | <i>M</i> | <i>F</i> | <i>MF</i>   | <i>M</i> | <i>F</i> |
| China (In Million)               | 218.8       | 70.9     | 147.9    | 166.2       | 46.7     | 119.7    |
| (In Percentage)                  | 34.0        | 21.4     | 47.3     | 18.5        | 10.1     | 27.3     |
| India (In Million)               | 250.6       | 97.9     | 152.7    | 290.7       | 108      | 182.7    |
| (In Percentage)                  | 59.2        | 44.7     | 74.7     | 48.0        | 34.5     | 62.3     |

*Source: Unesco reports*

The above table clearly shows that with the decline in illiteracy percentage from 34 in 1980 to 18.5 in 1995, the total number of illiterates in China has declined from 218.8 million to 166 million, whereas in India, with the decline in percentage of illiteracy from 59.2 in 1980 to 48 in 1995, the number of illiterates has increased from 250.6 million to 290.7 million. The task of eradicating illiteracy has increased in India in spite of achieving higher percentage of literacy.

### **China's State Policy on Literacy**

The task of achieving higher rate of literacy is guided by the State Policy on Literacy. The State Council of China laid down following goals for Literacy Promotion:

1. Every illiterate person among the young and the middle aged (15-45) has the right and obligation to learn. Any case of illiteracy is to be considered.
2. Areas which have achieved 9-year compulsory education are required to eradicate, in the main, illiteracy among the young and the middle aged within 5 years. Among the young and the middle aged for rural and urban areas, literacy rate, measured (and monitored) by village and neighbourhood committees, is to reach 95% and 98% respectively.
3. The criteria or the goal of literacy education consists of a vocabulary of 1500 words, abilities in practical writing, reading and enumerating.

It may be noted from the above that 9 years of compulsory schooling has been introduced all over the country as a part and parcel of the policy on literacy and it is an obligation for the parents to send their children to school, and if after persuasion, the parents fail to send their children to school, punishment / fine awaits them. It is of interest to note that enrolment rate in 1996 for the country as a whole was 98.8% with drop-out rate as low as 1.1%. This has stopped the entry of new persons to the pool of illiterates.

Further, adult education centres were opened to teach the young and the middle aged (15-45) and it was an obligation for them to attend classes and take the

test for literacy organised by the State Education Commission. Once the young and the middle aged who missed the school were covered by adult literacy classes and new generation was covered by enrolment in school with minimal drop-out, the problem of literacy was solved permanently. The problem remained to cover the aged and the limited drop-outs which became insignificant in years to come.

### **Indian Situation**

If we look at the Indian situation, the position looks quite gloomy and disappointing. Not only the young and the middle aged (15-35) as against 15-45 in China) are not being fully covered in the Total Literacy Campaign (TLC), the young children are not fully enrolled in formal schools and the drop-out rate in some areas is as high as 70%, the overall drop-out rate for the country being reported at around 54%. Thus, the new crop of illiterates is always coming up and the meagre results of TLC are being negated in as much as the addition of illiterates is more than that of the people made literate. This is clear from the Table 2 given above. The target of cent per cent literacy is becoming a mirage and we shall be lucky if we shall be able to attain 60% literacy by the turn of the century.

### **Population Policy: Its Impact on Literacy**

Adoption of one child norm for a family as country's population policy has brought about a sea change in literacy and educational scenario in China. It has brought down the growth rate of population to 1.3% and consequently, the rate of increase and absolute number of new children to be educated has declined and the State can concentrate its resources and efforts to look after lesser number of children. The parents also feel that they have only one child to be brought up and so they must pay their best attention to him/her. The parents save and spend for the child's education and it may be of interest to note that the parents have to spend the equivalent of between Rs.500 to Rs.1800 annually for primary education. As Indian parents have to look after many children, not only are they not in a position to pay the fees, but are continually using the children to get additional income to make their both ends meet.

Population policy is closely linked with literacy and school enrolment. We have viewed the problem of literacy and enrolment apart from population policy. The problem of literacy cannot be tackled without successfully implementing the population policy. The close interlinkage is obvious from the fact that a small family norm encourages the parents to educate their only offspring. If they have more than one child, they can educate one or two and leave the rest to their fate. When the family is large and the income is meagre, the family is more concerned to meet their food and clothing needs rather than their educational needs. The outlook of the family is changed when the one child norm is adopted and we saw it clearly in China. The women were also less burdened with the task of upbringing

the children and had more time at their disposal to improve their income and status. The women's social and economic status is drastically changed once they are relieved of the drudgery of rearing children every year or every alternate year. This was seen and realised by us on our recent visit to China.

The position of enrolment, drop-out rate, literacy and number of children born in every family is monitored by village and neighbourhood committees. Village leaders have full information about it, and pressure is mounted on women who get pregnant by mistake or otherwise after their first child, to abort it. As a result of one child norm, we did not find children running around the village, which is the general sight in any Indian village. Children were either in the school or in the laps of their mothers.

Mr. K.B. Sahay has observed that "the most desirable way to eradicate illiteracy is to impart proper school education to all boys and girls in their childhood. But can this goal be achieved in India? For the 180 lakh additional children every year, we need to open at least 90,000 new primary schools per year and even to cover 50% of those coming out of primary schools, 45000 secondary schools are to be opened every year. It should be clear by now that unless we check the inflow of 180 lakh additional children per year, illiteracy cannot be eradicated either through formal education or through non formal or adult education programmes".<sup>1</sup> It may be noted that literacy is a complex problem of multi-variables and cannot be solved by linear expansion of literacy programmes. Population policy of one child norm holds the key for various issues of health, malnutrition, literacy, housing unemployment etc. It is hightime that hard decisions are taken. Soft State has brought us to the brink of disaster.

### **Social Change: Foundation for Success**

Prof. Amartya Sen in his recent address to the members of the Confederation of Indian Industry (CII) in New Delhi, said that "the neglect of basic education, elementary health care, land reforms and those parts of infrastructure that favour smaller enterprise in Indian public policy makes the country more vulnerable to the negative effects of globalising process"<sup>2</sup>. The market economy flourishes on the foundations of social development contemporary market based economic success rests on the solid foundation of social changes that had occurred earlier and India cannot simply hope for that magic to happen without enabling those social changes in education, health care and land reforms<sup>3</sup>.

In the context of globalisation (which we cannot wish away) and need for faster economic growth, it is clear that India must prepare itself for fast action on

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<sup>1</sup>K.B. Sahay, 'Shame of Illiteracy', The Hindustan Times, October 24, 1997.

<sup>2</sup>The Economic Times, New Delhi, 30th December, 1997.

<sup>3</sup>Ibid.

social front and we must take lesson from China in this regard. Compulsory elementary education upto class VIII as envisaged in the Constitution must be attained in the shortest possible time, and that alone can check the growth of future generation of illiterates. This objective cannot be achieved unless it is realised that control of population is an essential part of the overall policy of social change. Adoption of one child norm is a must for our country and unless this is done we cannot think of moving ahead. It is surprising that political leaders have not been able to come out of fear psychosis created in 1975, the years of emergency, when family planning was forced on the people. They must now talk of population control freely and introduce some of the disincentives suggested by the Sub-Committee of the National Department Council which delved upon population policy.

**Tasks Ahead**

If we want to achieve the objective of full literacy and universal elementary education, we must adopt following measures immediately:

- \* Education should not only be a fundamental right but an obligation of every citizen.
- \* There must be 100% enrolment with minimum drop-out in primary schools.
- \* One child norm must be adopted to check the further growth of children to be catered to.
- \* Educate the young and the middle aged (15-35) within five years and run continuing education centres to mop up the rest of the population.

**Nishat Farooq**

## **Literacy Programme in Bangladesh**

Bangladesh became independent in 1971 through an armed struggle under the leadership of Sheikh Mujibur-Rahman. It is situated in the eastern part of the Indian sub-continent, having a population of 120 million, crowded in a territory of 147,570 square kilometers of deltaic, flood prone land. The population density is 755 per square kilometer. The population growth rate is about 1.8%.

Over population, unemployment, poverty, malnutrition and illiteracy are hard realities and problems in the development of Bangladesh. A survey conducted by the Bangladesh Bureau of Statistics (BBS) in 1996 reveals that Bangladesh has about 53% of its 15+ population illiterate and 38.70% of its primary school students drop out before completing the 5-year primary education cycle.

### **Culture and Language**

Eighty per cent of population in Bangladesh is Muslim. There is a tribal population residing in the hilly areas. It has a largely homogeneous society with a common culture and linguistic identity. The State language is Bangla. More than eighty per cent of the population is engaged in agriculture.

### **Economic Status**

Bangladesh is one of the poorest countries in the world with a per capita income of about US \$ 283.00. The proportion of hard-core poverty fell from 30.7 per cent in mid-1970 to 27.9 per cent in 1991-92. But the absolute number of persons in hard-core poverty has risen. A key factor contributing to poverty in Bangladesh is rampant illiteracy among the people, specially the women.

The future socio-economic prosperity of Bangladesh depends largely on faster economic growth, which in turn will contribute to alleviation of poverty. Poverty and illiteracy, which go together are inhibiting socio-economic development.

### **Administrative Units**

Bangladesh is divided into six divisions which have sixtyfour districts. Each district is further divided into thanas, each of which has several units. Villages are the smallest units. People living in the villages constitute eightyseven per cent of the population.

**Educational scenario**

Main emphasis is on the formal educational system which comprises three levels - primary, secondary and higher education. Vocational and technical education are organised at three levels - certificate, diploma and degree. Parallel to this system, there is also a traditional system known as Madrasah Education which is of 16-year duration. There are also religious educational institutions for the Hindus, Christians and Buddhists. Non-formal education is beginning to develop well in Bangladesh.

Literacy initiatives failed to achieve the desired targets due to various reasons. In the last 50 years haphazard attempts were made in an uncoordinated way which lacked a strong political commitment. These efforts were unable to make any remarkable change in the rate of literacy.

The rate of adult literacy in Bangladesh was 25.8% in 1974, 29.2% in 1981 and 35.3% in 1991. However, recently the situation has improved. The current adult literacy rate is about 47.3% (15 years and above).

**Mass Education in Bangladesh**

Mass Education programme was started on a large scale in Bangladesh in 1980 for the first time. The programme was abandoned in 1982 after a change of Government, and it was revived in 1987 as a pilot project in 27 selected thanas of the country. In the mean time the Compulsory Primary Education Act was promulgated in 1990 and made effective initially in 68 thanas, and became operational all over the country in 1993. In 1992, the Primary and Mass Education Division was created to promote primary and mass education. Integrated Non-Formal Education Programme (INFEP) was implemented, aiming at developing an effective and sound infrastructure in Non-Formal Education sub-sector. Now the INFEP Office has been upgraded to a Directorate of the Government.

The principal objective of Mass Education Programme is to introduce a non-formal education system, which is both supplementary and complementary to the formal education system.

To achieve the above objective the following NFE programme have been implemented:

- a) Establishment of an organised Pre-Primary Stream for infants (age group: 4-5), with a view to increasing enrolment and retention throughout the primary cycle.
- b) Programme for out-of-school and school drop-out children (age group: 6 - 10), to provide them with basic education and bring them back to formal schooling.
- c) Establishment of a non-formal education system for adolescents (age group: 11 - 14), who missed primary education.
- d) Introduction of a Functional Literacy Course for Adults (age group: 15 - 45).

- e) Consolidation of the newly acquired literacy skills of the neo-literates. Experiences reveal that neo-literates relapse into illiteracy in the absence of post-literacy and continuing education programmes.

### **Total Literacy Movement (TLM)**

While implementing centre-based literacy programmes, it was observed that people and the community could voluntarily implement literacy programmes in their respective areas if they were properly motivated through campaigns. Total literacy Movement has been launched in two districts. The unique feature of TLM is the involvement of administration and people from all walks of life in the movement.

Lalmonirhat district is the pioneer in the implementation of TLM. The district administration of Lalmonirhat, with community participation, launched its first phase of literacy movement by starting 976 literacy classes in 1994. In these classes 29,520 learners were made literate. The first phase efforts created a demand for literacy in the community and build an environment conducive to literacy in the district. This encouraged the district administration to launch the second phase of movement covering the entire non-literate population (11 - 45 years) in the district. A total of 7,237 centres with 2,23,600 non-literate population were opened. An external evaluation was conducted with the support of the United Nations Development Programme. Percentages of success, dropout and failure of learners were found to be 91, 8.2 and 0.8 respectively.

The success story of Lalmonirhat had a snowball effect and TLM was launched in some more districts. It attracted the attention of the visiting World Bank. (WB) and Asian Development Bank (ADB) Missions. They were impressed by the success. Moreover, political leaders also showed keen interest in the TLM. Mass media also paid attention and gave good publicity to the effort. They described it as a rare and remarkable feat.

In TLM, three approaches or modalities were applied conventional, contemporary, and modern. The duration of the literacy course in TLM is of 6 months followed by 3-month post-literacy programme. The cost of making a person literate is around US\$ 4.64 as against that of the centre-based programme which was US\$ 11.38.

**TLM activities in Bangladesh (upto May, 1997)**

| <i>Sl. No.</i> | <i>Area</i> | <i>Number of Centres</i> | <i>Number of Learners</i> |
|----------------|-------------|--------------------------|---------------------------|
| 1.             | Lalmonirhat | 8213                     | 2,68,130                  |
| 2.             | Bhola Sadar | 4026                     | 1,06,941                  |
| 3.             | Chandanaish | 965                      | 30,000                    |
| 4.             | Chuadanga   | 7354                     | 2,20,628                  |
| 5.             | Polash      | 1800                     | 54,000                    |
| 6.             | Harirampur  | 840                      | 25,200                    |
| 7.             | Nilphamari  | 3333                     | 1,00,000                  |
| 8.             | Faridpur    | 3333                     | 1,00,000                  |
| 9.             | Gopalganj   | 4000                     | 1,20,000                  |
| 10.            | Rajshahi    | 21195                    | 6,35,856                  |
| 11.            | Sylhet      | 3333                     | 1,00,000                  |
| 12.            | Madaripur   | 3333                     | 1,00,000                  |
| 13.            | Narsingdi   | 2667                     | 80,000                    |
| 14.            | Joypurhat   | 2167                     | 65,000                    |
| 15.            | Bhola       | 3930                     | 1,17,926                  |
| 16.            | Barishal    | 1787                     | 53,547                    |
| 17.            | Naogaon     | 3042                     | 91,240                    |
| 18.            | Panchagarh  | 678                      | 20,600                    |
| 19.            | Kushtia     | 1940                     | 59,409                    |
| 20.            | Noakhali    | 2167                     | 65,000                    |
| 21.            | Pirojpur    | 1200                     | 36,000                    |
| 22.            | Rangpur     | 270                      | 8,100                     |
| <b>Total</b>   |             | <b>81,582</b>            | <b>24,57,577</b>          |

It was observed during the movement that female participation was more in comparison to men. It was difficult to motivate them for literacy. Some social barriers were also faced in mobilizing girls and women. Natural disasters like cyclones and floods also created problems and disturbed the continuity of the movement.

Only one Primer is being used throughout the country, because there is culture and linguistic identity and Bangla is the mother tongue of more than ninety per cent of people.

Library movement is already existing in the country and post-literacy efforts get their support.

### **Model Thana**

An experimental literacy programme has been implemented in 10 selected model thanas as building blocks towards a demand for total literacy. This programme has been implemented through intensive literacy activities. Assessment of the learning needs, community participation and documentation of literacy activities are some of the highlights of this programme. An external evaluation has been conducted to assess the effectiveness, strength, weakness and impact of this experimental programme, and its findings are quite encouraging. The evaluation reveals that the literacy rate in the ten model thanas now stands at 73.22 per cent (male - 74.31%; female - 71.91%). The perception of local people about the programme has been very positive. They accepted the programme cordially and extended whole hearted co-operation to make it a success. The literacy level of learners as evidenced by their reading, writing, numeracy and life-skill standards increased in the project areas. The programme was also effective in empowering women learners by raising their awareness about their rights and privileges in the society, and it seems to have expanded their income generation opportunities as a consequence of effective skill training.

### **Government Policies and Plans**

The major targets of the Government to be achieved by 2000 AD are Human Resource Development, poverty alleviation and women's participation in development. The strategies include expansion and improvement of basic education, continuation of compulsory primary education and support for a gender sensitive educational system. The National Plan of Action has the following specific objectives:

1. Raise the gross enrolment in the primary schools from 76% to 95%.
2. Raise the female gross enrolment from 70% to 95%.
3. Increase 5-year primary education cycle completion rate from 40% to 70%.
4. Raise the adult literacy rate from 35% to 62%.

The present Government is politically committed to impart literacy to all adults (11 - 45 years) by year 2005.

## Vision and Challenges

| <i>Age group</i> | <i>Available Population<br/>for NFE by 2000 (In million)</i> | <i>Target in 1996-2000</i> |                                      |
|------------------|--|----------------------------|--------------------------------------|
|                  |  | <i>Rate</i>                | <i>No of people<br/>(In million)</i> |
| 08 - 10          | 1.60   | 40%                        | 0.64                                 |
| 11 - 14          | 4.00   | 50%                        | 2.00                                 |
| 15+              | 41.60  | 50%                        | 20.80                                |
| <b>Total</b>     | <b>47.20</b>   | <b>49.7%</b>               | <b>23.44</b>                         |

To meet the commitments made at different international fora on 'Education for All' and to bring the whole illiterate population under literacy fold, the Government of Bangladesh is determined to further expand the nonformal education network. A comprehensive NFE project, called the NFE Project-4 with a duration spanning up to December 2000 has been initiated. The objective of the project is to impart non-formal education to non-literate adults (11 - 45 years) by adopting following two approaches.

- a. Using voluntary participation of primary schools, high schools and college teachers.
- b. Providing honoraria as a part of temporary employment to the local unemployed youths participating in the literacy programme as teachers/supervisors.

The project aims at using the potentialities of 0.43 million unemployed youths by creating employment opportunities for them during the implementation phase. The Project, likely to be implemented by the campaign mode, will contribute to the making of a learning society, vibrant with activism, tolerance and positive attitude. On completion of the project a total of 22.88 million adults are expected to become functionally literate.

## Government and NGO Collaboration

In Bangladesh NGOs are major partners in implementing the adult literacy programme in the country. To share and use their expertise in management, monitoring, training, material development and follow-up, those NGOs encourage other NGOs, as well. The Government of Bangladesh has been providing financial and material support to selected NGOs under a mutually agreed subvention criteria for NFE programme implementation. BRAC, CODEC, SOLDARITY, PROSIKA, Dhaka Ahsania Mission are some of the important agencies. These organisations have been providing technical support to the literacy programme. A constructive partnership has developed over time between government and non-government organisations for pursuing the common EFA goal. Both are working hard. Regular

exchange of views and experiences is taking place in workshops and seminars organised by both.

**Conclusion**

A sense of interest and consciousness towards literacy programme is being observed at all levels. Campaign based NFE is being implemented in many districts. The thrust of NFE has also created increased enrolment in primary schools. NGOs and the Government of Bangladesh are striving hard to eradicate illiteracy from the Country.

There is still a need to give more emphasis on the mobilisation of people to participate in literacy campaigns. The tribal and hilly areas need greater attention. Different strategy has to be evolved for flood-prone areas. Only then literacy rate in Bangladesh will improve.

However, the initiatives taken towards the institutionalisation of literacy in the form of continuing education is an important step towards turning its population into a developed human resource.

**Sunil Job K.A.**

## **Computer Literacy**

A famous biblical quotation "Ask you shall receive, Seek you shall find, Knock it shall be opened to you" is a promise that was given to mankind by the Almighty in a spiritual dimension. Our technology actualise it in a physical dimension through our little master – The Computer, the worker of miracles through its speed and accuracy. The novel idea that sparked from the mind of Charles Babbage would not have thought to conquer this world in such a short span of time. Now the phases of technology have been totally dominated by computer and it has taken its roots deep in almost all walks of life. The application of computer software and hardware can be rightly termed as explosion. The latest package become outdated in a span of just three to six months. Studies infer that 90% of the technology that we would have to use in 21<sup>st</sup> century is yet to be discovered and the lion's share of it ought to be credited from the bank of computers. Hence, a computer friendly generation is the prime need of the day to equip our society which is preparing to step into the 21<sup>st</sup> century. In the emerging scenario of the 21<sup>st</sup> century man would be incomplete without computers. The society is transforming to such a state that man would become only a thinking organism complemented by the computers as a doing machine. It is true that such a relationship would become more and more intense and integrated in the run of time. Let whatever be the consequence, it is a fact that in the 21<sup>st</sup> century a man cannot exist in harmony with the society without the knowledge of computer. Thus, we are not too late to add a new clause to our social education concept, that is, to include computer literacy as a part of social education and to boost it up with Adult Education programmes.

During the last decade our society witnessed a drastic mission to elevate our masses to the stage of functional literacy. The periodical phases of literacy programme were charted out and a mass approach was attempted in the actualisation of this goal. A similar effort in computer literacy at this stage will be an absurd idea, but the time is ripe to have an initial phase of literacy by a mass approach to instill in the masses a general awareness about computers followed by computer literacy to achieve a basic level of functional literacy through a selective approach.

**Mass approach to a computer friendly society**

The first phase in any social transformation is to create an awareness about the significance of the new situation so as to discard the conflict of tradition versus modernism. General awareness about computers, such as what they are, their scope and significance and how they will influence the people life in the days ahead, has to be developed in very simple terms and integrated with the second and third

phases of literacy programme. Special literacy kits to suit the neo-literates has to be prepared and distributed. Mass media, print media and special films on computer-related topics, should be used in creating computer awareness. Awareness talks and classes for beginners in a computer have to be organised. Above all, a personal commitment by the computer professionals to create an awareness in his fellow men and women who are ignorant about computer and to create a computer friendly environment which will be fertile enough to boost up the computer aptitude in our forthcoming generation so as to scale greater heights in computer technology are necessary.

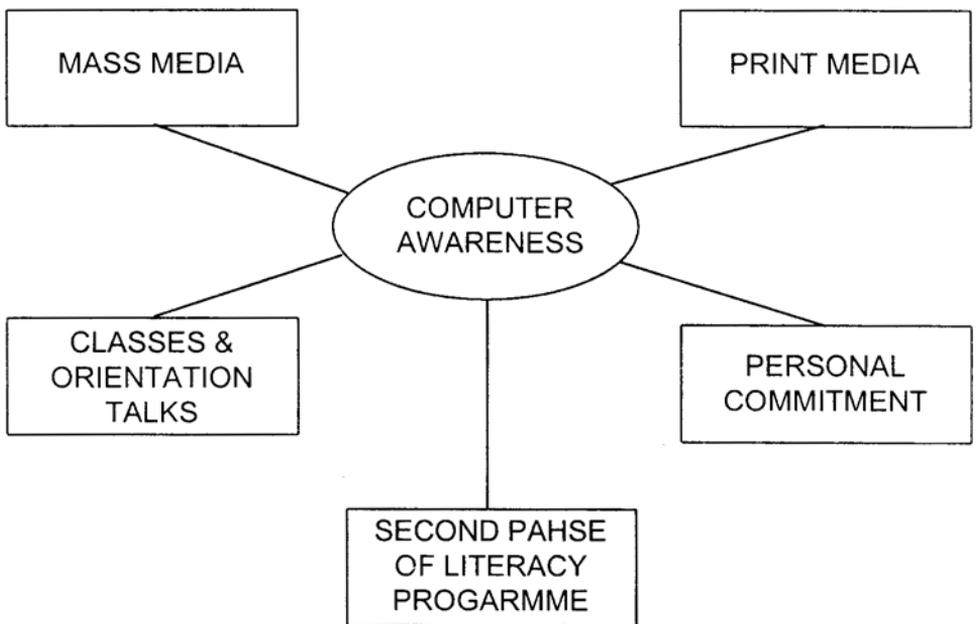


Fig 1.1: Mode of Spreading Computer Awareness

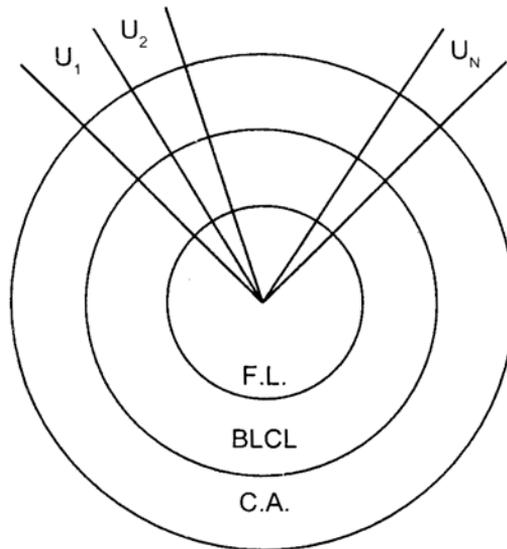
**Selective Approach to Computer Literacy**

Universalisation of functional level of computer literacy is not a practical end that could be attempted with, especially in this situation, where the universalisation of primary education remains a distant dream. Hence, a delimitation in the coverage could be successfully met by the extension of the provision of computer education at least to one member of every basic unit (family) of the society, but there should be no compromise in the dissemination of computer awareness to our entire population, for a conducive and a congenial environment could be generated

in the society only through a computer friendly generation.

One of the practical means in the attainment of this end is to integrate computer education with school curriculum. The curriculum in computer studies too has to be developed in a psychological manner in accordance with the mental maturation of the pupil, but at the higher secondary level the compulsion on computer education has to be withdrawn. The integration of computer studies at the school will equip our students with sufficient basic knowledge by the time they leave the secondary school. Financial parameter is an important factor for the implementation of this proposal, but it could be tackled to some extent by providing machine hours from the higher classes onwards and to adopt a shift system in the usage of machine hours.

Launching of a computer literacy mission is the most effective move in the actualisation of this goal, and for this, the involvement of voluntary agencies, computer training centres, service of the trained personnel and students is necessary. Country-wide classroom for the motivated adults should be organised on a part-time basis with the assistance of voluntary agencies, trained personnel and



- F.L. - Functional level of Computer Literacy (with free machine hours)
- BLCL - Basic Level of Computer Literacy
- C.A. - Computer Awareness
- $U_1, U_2, \dots, U_N$  - Different family units of a Society.

Fig 1.2 - Selective approach in spreading Functional Level of Computer Literacy.

students so that a crash package in computer programme could be dealt with, the persons who show special calibre should be identified and a provision for free usage of machine hours should be provided. A minimum amount as registration fee may be collected. It is not necessary to provide free machine hours to more than one person from one family unit. The success of such a scheme could be ensured only if training institutions and instructors come forward with sincere help and dedication by sparing their free time for this selfless social service.

In the implementation of such a project, a district level cell to be chaired by the District Collector, has to be organised with representatives from the voluntary agencies, heads of computer training institutions, professionals in computer software, to plan a feasible design for implementation of this project.

The computer literacy project can promote a good career in the 21<sup>st</sup> century. In the modern times the knowledge of computers is essential in every walk of life.

The vision of 21<sup>st</sup> century seems to be a computer era where a person without computer literacy will definitely be a fish out of water.

## **Adult Education News**

### **48th All India Adult Education Conference : A Brief Report**

Shri R Krishnappa, Minister of State for Adult Education and Public Libraries, Government of Karnataka said in Bangalore on December 21, 1998 that educational opportunities be provided to all and the adult education programmes should not be confined to non-literates only. He said that continuing education programmes be extended to rural areas and technological developments be made available to the common man.

Shri Krishnappa was delivering the inaugural address of the three-day 48th All India Adult Education Conference jointly organised by the Indian Adult Education Association and Bangalore University.

He drew attention of the participants to the old Mysore State which, he said, was pioneer in the adult education programme. The various Vidyapeeths set-up by Karnataka State Adult Education Council had done some pioneering work in providing opportunities for life long learning. The Vidyapeeths, he said, had done a great job in intellectual and professional development of the individual.

He called upon the adult educators to spread literacy among the illiterates and correct the prevailing inequality. "The present era requires a person to be equipped with latest information and continuous learning would be of much use in this regard" he noted.

Dr. NR Shetty, Vice-Chancellor, Bangalore University called upon the universities and other educational organisations to join together to tackle the problem of illiteracy. "Concerted efforts are necessary to overcome illiteracy in the country".

Citing the example of China, Dr. Shetty said the country had within 10 years, almost eradicated illiteracy. The concept of adult education was just not eradication of illiteracy but it varied from country to country, he said.

He said that if immediate and earnest steps are not taken to eradicate illiteracy, India would be home for 50% illiterates of the world by next century. He said that China should be role model to eradicate illiteracy.

Dr. Shetty said that it was astonishing that in spite of achieving technological superiority, India faces fund crunch for education and regretted that a small percentage of the GDP is utilised for education.

By experience, it is found that elementary education alone could not help in spreading literacy and as such, the need for adult education has become all the more important, he said. However, Dr. Shetty felt that the concept of continuous learning may not be feasible as the country had not achieved the desired level of literacy. Criticising universities for having remained in ivory towers, he said till now they had the neglected adult education field. All government organs,

non government organisations (NGOs) and universities had to take adult education seriously, he noted.

The President of the Indian Adult Education Association, Prof. BS Garg in his address regretted that learning throughout life had not been achieved and said that the terminal concept of education was not adequate in the present social, economic and technological context. "Today education does not give the stimulus that can last throughout one's life," he said.

Observing that informal education had a great role in making learning life-long, Prof. Garg, who is the Chancellor, Rajasthan Vidyapeeth, said agencies like film, television and radio should not only make their programmes entertaining but also informative and educative. According to him, adult education should be taken as a tool of human development and self reliance.

Prof. Garg said that education of the senior citizens was essential to make life long learning a reality. The ageing person should be given opportunities to function more effectively as a citizen and for creative expression as an individual.

He said that for achieving the objective of life long education some changes in formal education were also needed. The education in schools and colleges should be sufficiently attractive so that the young people might feel like returning to it when they grow old. It should create an aptitude and sustain the desire for learning.

Earlier, Prof. M Khajapeer, Chairman, Department of Education, Bangalore University welcomed the chief guest and the participants.

Shri KC Choudhary, General Secretary, IAEA in his vote of thanks said that mass media had to play a meaningful role in making learning life long. He said that programmes in the electronic media should be interesting and imaginative to have impact on the masses. Shri Choudhary said that well organised library system could go a long way in achieving the objectives of life long education. The libraries, he said, were the best means to provide self education to the masses.

Shri Choudhary said that in the global market economy, structural adjustments were being made and due to that many people might be out of job. To make people adjust to the new situation, education had to be life long so that the employed, unemployed and underemployed are in a position to face competitive labour market.

### **Plenary Session**

In the plenary session, Prof. BB Mohanty, Vice-President, IAEA presented the working paper. He said that there was a direct link between education and national development and such a link was strengthened when the national system of education was properly organised from both quantitative and qualitative point of view.

Education for tomorrow, he said, must be a coordinated totality in which all sectors of society are structurally integrated. He said, such education would

be universalised and continual and would be total and creative from the point of view of individualised people.

During general discussion the major suggestions made were:

1. Self education should be promoted to achieve the objective of life long learning
2. Population education, health education, environment education should be part of adult education to achieve the objective of life long education.
3. All round development of the individual should be the goal of education.
4. Media support was essential to make learning life long.
5. Special programmes for senior citizens should be organised.

Shri BL Parakh and Dr. KS Pillai, Vice-Presidents of the Association presided over pre-lunch and post-lunch sessions.

The delegates discussed in groups the following sub-themes of the Conference:

1. Life-long learning : Obstacles and Prospects
2. Critical importance of adult learning
3. Life-long Education for future in the context of the Emerging Technology of the 'Information Society'
4. Future Policy of Adult Learning

The group chairmen were:

1. Prof. GC Khan, Professor of Social Work, Visva Bharati University, West Bengal
2. Prof. Niranjan Reddy, Prof & Head, Deptt. of Adult Continuing Education and Extension, SV University, Tirupati
3. Dr. A Muralidharan Tampi, Vice-Chairman, IAEA Kerala Branch
4. Shri MP Tewari, Bureau of Adult Education, Ministry of Human Resource Development, Government of India, New Delhi.

During the Conference the following thematic workshops were also held:

1. Role of Adult Education in Creating Scientific Temper
2. Environment Education for Sustainable Development.
3. Role of Adult Education in Creating Awareness about HIV/AIDS
4. Adult Education for Skill Development
5. Adult Education for Human Rights

During the presentation of the reports of innovative work done by NGOs,

universities, TLC districts, Shramik Vidyapeeths the following things were highlighted:

1. Different strategies for literacy should be adopted and the literacy campaign should not be the only approach.
2. Universities should be given independent role in literacy campaigns.
3. Incentives to volunteers are essential for success of the programme.
4. Adult Education should play a meaningful role in eradicating social evils.
5. Local initiative and participation is essential for the success of the programme.
6. Community should finance the programme and should not be entirely dependent on the Government.
7. The Association should set up a separate unit to achieve the goal of life long learning.
8. The Diamond Jubilee of the Association should be celebrated in every State.
9. The Panchayat in rural areas and wards in urban areas should be given complete responsibility to eradicate illiteracy and promote life long education in their respective areas.
10. Material designed in local dialect helps in promoting literacy/post-literacy.
11. Cooperation/coordination between Govt./NGOs and university departments of education have brought encouraging results in promotion of literacy.
12. Short literacy camps hold attention of learners to give them a head start in pursuing their education.
13. Working around health and social conditions create interest among learners.
14. Social change in tribal areas and women from weaker sections create interest in literacy.

Smt. Kamala Rana and Shri BN Kamble, Vice-Presidents, IAEA presided over the sessions.

### **Valedictory Function**

In the valedictory function, Prof. KH Chalvaraju, former Vice-Chancellor, Gulbarga University was the chief guest. In his address, Prof. Chalvaraju said that adult education was catalyst of social change and all out efforts should be made to provide educational opportunities to the masses. He said due to liberalisation, inequalities would be more and it was only through education the problem could be overcome.

He said that by the recent amendments the people at the grass-root level are to participate in the development process but this is not possible because of illiteracy among them. To enable the masses to get the fruits of development they should be educated.

Prof. Chalvaraju said that involvement of youth was essential for the success of the programme but it could only be possible if they get recognition and incentives. Open universities and Institutes of Correspondence Courses are providing useful service in spreading education and should be encouraged.

Prof. Chalvaraju proposed that a separate channel of television should be started to boost this programme. He also suggested setting-up of commission on adult education in the 21st century.

Prof. BS Garg in his presidential remarks said that all round development of the individual should be the main objective of adult education and the present programme of literacy education should be made more broad-based. He said that integrated education which includes literacy, health, education and vocational education should be promoted. Spiritualism, he said, was the biggest asset of India and should be important component of the adult education programme.

Prof. Garg urged the need to conduct research in adult education so that the problems faced by the programme could be solved.

Dr. MS Talwar of the Department of Education, Bangalore University and Shri KC Choudhary, General Secretary, IAEA proposed the vote of thanks.

About 250 delegates representing the Central and State Governments, Universities, SRCs, Shramik Vidyapeeths, TLC/PLC Districts and NGOs from the States of Andhra Pradesh, Bihar, Delhi, Gujarat, Goa, Haryana, Himachal Pradesh, J&K, Kerala, Karnataka, Madhya Pradesh, Maharashtra, Manipur, Orissa, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal participated. ■

### **Forum on Population and Development Issues**

The Forum on Population and Development Issues concluded in the Hague on 12 February with delegates from 177 states approving a report covering such vital areas as creation of an enabling environment for population programmes, gender equality and the empowerment of women, reproductive rights and health, strengthening partnerships and financing.

The forum had been held to appraise the implementation of the Programme of Action adopted at the 1994 International Conference on Population and Development (ICPD). Addressing the closing session of the forum Dr. Nafis Sadik, the head of the United Nations Population Fund (UNFPA), said that the most important achievement of the meeting was showing that the ICPD "was far more than a piece of paper" and that it worked.

The Executive Director of UNFPA said that in all of the countries represented at the forum some steps had been taken to make the ICPD a reality and its implementation was moving ahead rapidly. She said that participants had demonstrated that population was a very broad concept which encompassed action by communities to ensure that women did not need to fear violence and included

policies to ensure that social programmes were given due priority in allocating national development resources.

Dr. Sadik pointed out, however, that a number of challenges and obstacles still remained. Notable among these, she added, were a weak political commitment to the right of adolescents to reproductive health and different approaches which led societies to different conclusions. Other reproductive health issues which needed attention, Dr. Sadik added, were the needs of women and adolescent girls in emergency situations.

The dialogue in the Hague, the head of UNFPA said, had confirmed that governments were increasingly involving non-governmental organizations, including women's and youth groups, in policy formulation and programme implementation. She said that the participants had also addressed the need to deal with the constraints which still hindered the enabling environment for the Programme of Action. ■

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The Indian Adult Education Association founded in 1939, aims at improving the quality of life through education visualized as a continuous and lifelong process. It directs its efforts towards accelerating adult education as a process, a programme and a movement.

The Association co-ordinates the activities of various agencies--Governmental and voluntary, national and international--engaged in similar pursuits. It organises conferences and seminars and undertakes surveys and research projects; it endeavours to up-date and sharpen the awareness of its members by bringing to them from all over the world expert views on, and experiences in, adult education. In pursuit of the policy, the Association has instituted the Nehru Literacy Award and Tagore Literacy Award for Women's Literacy, for outstanding contribution to the promotion of adult education in the country. It has also instituted the Dr. Zakir Husain Memorial Lecture, which is delivered every year by an educationist of eminence.

The Association has brought out many publications on themes relating to adult education, including the Hindi editions of several UNESCO publications. It brings out the Indian Journal of Adult Education, Proudh Shiksha, Jago aur Jagao and IAEA Newsletter.

The Association acts as the Indian arm of the International Council for Adult Education, International Federation of Workers' Education Associations and the Asian-South Pacific Bureau of Adult Education. Its membership is open to all individuals and institutions who believe in the aims and objectives of the Association.

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