

SHRAM NIKETAN: EDUCATION AS LIVING EXPERIENCE

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Introduction

Whenever problems are encountered in the progress of a society towards objectives set by those who govern that society, experts automatically turn towards education as a means of overcoming those problems. Education is regarded as a well spring of new values, moralities, attitudes and techniques. But perhaps it is necessary to distinguish between an "educational system" and "education". No matter what is expected of "education", eventually it is the "educational system" that will have to act as the channel for achieving those expectations. And every system has its own built-in limitations. In that respect the educational system in India is very much a part of the social system. Just as the social system has been unable to benefit the Harijan (lower castes) and the Adivasi (tribal), indeed, in general, it has further deprived and pauperised them, so the educational system has been unable to rid the country of the design imposed upon it over 150 years ago. Experiments in non-formal education are often drawn into the same apparatus by requiring that non-formal learners go through the same formal examinations. Any changes that are brought about within the system - as the experts themselves confess - are because of the presence of "devoted and dedicated" teachers. But these devoted and dedicated women and men have to operate within the limitations set by the educational system in which they survive.

This study attempts to look at what a devoted and dedicated individual, outside the educational system, can do in non-formal education. There are many weaknesses in such work - principal among them being the inability to replicate itself. However, it is included in the conviction that this study may add to our knowledge of the dynamics of a truly non-formal pattern of education.

National Perspective

The national perspective on universalisation of education is based on Article 45 of the Indian Constitution adopted in 1949, which stipulated that free and compulsory education should be provided to all children up to the age of 14 by 1959. However, now in 1982 all

children in the age group 6-11 have not been drawn into the schools. The national average for primary school enrolment is 85 per cent and in the case of a State like Madhya Pradesh it drops to 63 per cent. The position in the 11-14 group is much worse, with 40 per cent being the national average and the Madhya Pradesh figure being 28 per cent. Different Commissions and Committees have periodically deliberated on this question over the years and have suggested schemes to overcome the problem. They have all, to a large extent, identified the problems as the non-availability of educational facilities and the non-enrolment even where educational facilities exist. According to the experts, there has been a tremendous expansion in educational facilities but this has been negated by the equally tremendous population growth. At the same time the main reason for non-enrolment has been identified as the poverty of families who are forced to treat the child as an economic asset rather than send her or him to school. From such reasoning it becomes apparent that: (a) where educational facilities have expanded they have catered for those who can afford to send their children to school; and (b) even if much greater expansion were undertaken, education would still not reach the poor unless the conditions of their poverty are changed. Most of the government schemes have, however, tried to solve the problem by administrative and curricular reforms with increased allocation of funds. Funds have attempted to tackle the inter-relationship with poverty, far less to understand it.

In the State of Madhya Pradesh (MP) there have been four schemes designed over the last eight years to extend non-formal education to more children. The earliest of these was begun in 1975 and is a result-oriented model linked with the formal education system, being tried out in all the districts of MP under jurisdiction of the District Education Officers and the Basic Teacher Training Institutes. The instructional work for children is generally held in the schools outside normal school timings, either in the morning or in the evening. Each centre is designed to cater for 40 students and is provided with funds for books, slates, chalks, lanterns and a box. The teacher is provided with a contingent fund of Rs. 250 for three months and an honorarium of Rs.50 per candidate passing the 5th class examination and Rs.100 for each student passing the 8th class examination.

The second scheme was started in 1979 by the National Council of Educational Research and Training (NCERT) in the Rajgarh and Bhopal districts through its Regional College of Education, Bhopal and the Field Adviser, NCERT. They provide training to teachers on the basis of the curriculum developed by NCERT. These teachers are paid Rs.150 per month to run non-formal education centres and their work is overseen by a supervisor who is paid Rs.350 per month. The centres also prepare children for the final examination of the 5th class of the formal schooling system.

The "Panghat Yojana" scheme was initiated in 1979 in Hoshangabad district focusing on village uplift through the education of children

and adults. For those desirous of joining the educational mainstream it links non-formal instruction with the formal system. There is further provision in the scheme for participation of the community in deciding the objectives and content of education.

The fourth scheme "Earn while you Learn" started in 1981. Earlier it was tried in some secondary schools on an experimental basis by providing looms at the school for students to work on and earn some income for their schooling. This has now been extended to the non-formal education centres in the hope that the economic motivation would attract more children in the age group 10-14.

All these schemes are connected with the formal schooling system either through examinations or through the school teachers. None of them, except the "Learn while you Earn" scheme in a marginal way, has tackled the basic nexus between poverty and non-education. There have been other non-formal education attempts by non-government organisations scattered throughout the State, but these too have, by and large, prepared learners for the formal schooling system. For success, all have depended heavily upon the dedication of the teacher, as otherwise all the usual problems of corruption, mismanagement, misappropriation of funds and false attendance registers would have crept in. On the other hand while repeatedly it is claimed that these schemes have reached the weaker sections, i.e. the tribals, harijans, and girls, there is, in fact, little supporting evidence.

The effort under the National Adult Education Programme has been massive with almost 5,000 non-formal education centres expecting to reach out to over 50,000 children in about 5 years. But in MP there are 70,883 villages and only 45,308 have primary schools. This means that perhaps 10 per cent of the villages with schools could have access even to non-formal education. Obviously, therefore, huge sections of tribal, backward and deprived areas remain deprived. It is within this perspective that we examine the case of a single individual, Shyam Bahadur Naura, and his miniscule effort in the village of Jamudi in Shahdol district of MP.

The Locale

Approximately 50 per cent of the population of Shahdol is tribal. The major tribes are Kol, Gond, Baiga and Bhuinya. While some of the tribes still attempt to eke out a meagre existence in the fast dwindling forests, others have moved into the phase of settled agriculture and others are fast swelling the ranks of the unemployed. The tribals have been historically dependent on the forests which have met a large range of their needs. In the face of massive deforestation and the consequent ecological damage, the situation is rapidly worsening. In general, however, their agricultural practices are primitive, so that even those who own sizeable tracts of land, are unable to derive much benefit from them. The level of irrigation is extremely low; coupled with the undulating terrain and paucity of water resources, the product from the land is pitiful.

Yet, it is only agriculture that can sustain the people, for the activities that are not directly related to agriculture sustain barely a tenth of the population. The region is rich in resources, mineral and forest. There are very rich deposits of coal and bauxite in the district, and mining is a major source of revenue to the government. The commercial and industrial development of the forests sustains paper manufacture at one of the largest modern paper mills in Asia. But the industrial townships, far from benefiting the region, have succeeded in colonising the surrounding areas, adding to the despoilation of the countryside. Products of the forests find their way to virtually every corner of the country to feed numerous manufacturing processes. The whole trade in these products is tightly controlled through a whole network of middlemen and their counterparts in the bureaucracy. It is typical of the pattern of hinterland areas: rich in resources, dominated by an outside immigrant section, with the tribal population in subjugation providing cheap labour, and the consequent backwardness in spite of the development of mining and manufacture.

The region has the potential for the cultivation of an amazing variety of crops: cereals, oilseeds, vegetables, fruit and fibres. Today, however, it is a monocrop economy with very low wages in agriculture, massive unemployment in the dry season, and very poor prospects of employment in alternative activities linked to the development of the region. Consequently, share-cropping and bonded labour practices are maintained through extortionate rates of interest on seed loans. These loans are primarily given by landlords and rich farmers to maintain their stranglehold over the labourers. Price manipulations in agricultural and forest products enable traders to reap rich profits through monopolistic trade.

On the face of it, the educational system seems quite impressive. In a district with 2150 villages, there are over 1000 primary schools, nearly 200 secondary schools and 36 higher secondary schools that feed students into 3 government colleges. Yet 85 per cent of the population is illiterate; the literate 15 per cent belongs mostly to the dominant classes and knows little beyond the arithmetic of profit and loss calculation. Teaching practices are irregular, outmoded and value-laden. Teachers use students for their personal errands; most instruction is imparted through the cane in preference to other pedagogic methods. The desperate economic plight of the poorest sections makes the attendance of their children at school virtually impossible. Youngsters have to pull their weight by collecting firewood, grazing cows, tending siblings and cooking food in the absence of their money-earning parents. Many teachers seek to lighten their own burden by placing further obstacles in the path of the poor: school uniforms and shoes, books and pens, assume disproportionate importance in the pedagogic process. At one school, the tribal student standing first in class was given a tin of shoe polish and a shoe brush for three consecutive years as a "prize", until he rebelled saying he did not have the money for a pair of shoes! It is not surprising, then, that members of the labouring classes

cannot make wage and earthwork calculations, do not understand weights and measures, and do not realise the enormous exploitation induced through the control of markets. Therefore, it is these labouring classes to whom a programme of non-formal education must reach.

Shyam Bahadur Naura

This was the environment within which Shyam Bahadur Naura, an "outsider" to the area, decided to start off the process of education. That was in 1977. It was an individual initiative taken at the end of nearly 20 years of experience gathered in a variety of educational institutions and social work agencies. In those 20 years, Naura had been a primary school teacher, a Gandhian worker, a participant in the J.P. (Jaya Prakash Narain) movement in Bihar and had identified the weakness of different kinds of formal and non-formal education. He wished to chalk out his own experiment. Since it was an individual experiment without institutional support, it was necessary that the survival of his family be generated in the course of the educational activity. This was the link between education and production; it was the process of production in agriculture which gave rise to conflicts, the analysis of which formed the content and shaped the development of the educational programme. Equally, it was production that made Naura acceptable to the community and sharpened his insight into the conflicts of development within the region. The educational tasks were shared between him and his wife.

Origin and Objectives of the Project

Naura's entry into the spirit of the educational experiment really began with his well. He wanted to dig a well on his land for irrigation purposes and approached the local bank for a loan under the Small Farmers' Scheme. He was duly given a loan but on condition that the well be dug to the bank's specifications. So, over a painful four months a well 20 feet wide and eighty feet deep was dug - but to no avail. The water was not even enough for drinking. So Naura approached the bank for another loan to dig a second well of his own design near a neighbouring rain-fed minor stream. The bank refused and demanded payment of the original loan. Naura had to fill up the first well (as it was in danger of collapsing and ruining the land near it) and to dig a second at his own cost. When he finally managed to get the second one ready and asked the Electricity Board for a connection for an electric motor pump-set, the Board refused on the grounds that the well was not dug where the bank had sanctioned it. Finally indignant at these repeated Catch-22 situations, Naura went on hunger strike in protest against the Board's decision. An agitated farmer population, suffering from many such similar experiences, fully supported him and the eventual installation of the electric line was regarded as not only a moral victory for Naura but a landmark for all farmers in the area.

Naura's original conception lay in the desire for non-institutionalised intervention in the social process. As explained by him, the continual opposition of interests in society make its influence felt on all the institutional structures within society; these institutions are then subverted to serve the interests of a dominant ideological trend, and the programmes of the institutions lose organic contact with the existence of the oppressed groups in society. Further, he felt that the educational institutions in society are unable to resolve the opposition between the survival needs of its oppressed members and their desire to acquire an education which they can use to project their own interests. As a result, they fall prey to the irrational and unscientific explanations created by a dominant ideology which they are unable to counter. Their own survival demands that they develop a scientific, materialist outlook which they can apply to the resolution of their own conflicts. They seek knowledge that can be put to immediate use, and this is the measure of value that can be attached to knowledge.

Naura specified his experiment as follows:

- (i) Education has to be linked to production. Only then can it fulfil the survival needs of the educators and the learners. Understanding production and the social relationships that arise is the framework within which a scientific outlook can be developed.
- (ii) Such a pedagogic process has to be non-institutionalised as it may lead to a direct questioning of the social relationship inherent within the production.
- (iii) The freedom of the learner to ask questions is a part of the development of the scientific method; only then it is possible for the educator to take the student forward from the known towards the unknown. Formal education, with its emphasis on books and examinations, does not permit the development of this process of acquiring knowledge. Earlier experience in a 'model' school had shown Naura that this approach was effective in imparting instruction in the sciences, geography and history through the additional use of charts, maps, globes and pictures to make explicit the interconnections between events. In the training of teachers, too, it was repeatedly emphasised that the learner be guided from the known towards the unknown; but the inflexibility towards introduction of new techniques and the system of evaluating students were incompatible with the principle.
- (iv) The earlier experience with a model school had also demonstrated that a dialogical approach, known as a "direct approach", helped the student in learning language and acquiring literacy, provided the dialogue could be related to the experiential background of the learner. These earlier

experiences were such as could be generalised, as the experiment had involved four experienced teachers and nearly 100-150 teacher trainees since the school had been attached to a teacher training institution.

Objectives

The experimental design had five major objectives:

- (i) survival of the activist in the environment;
- (ii) development of roots in the community, so that the conflicts that the activist would strive to resolve could be extended to cover other sections of the community;
- (iii) education of the oppressed sections to take place even as they laboured for their survival;
- (iv) pragmatic linkage with other individuals while maintaining the autonomy necessary for experimentation; and
- (v) replicability in other environments.

Naura focused on the direct learning of the labourers as they constituted approximately the age category 11-16 years, setting the expected levels of learning as: (i) information on agricultural production techniques; (ii) scientific knowledge of biological process in nature; (iii) wage calculations, weight and volumes measurements; and (iv) a minimum ability to read and write.

The learning goals were empirically identified, within the framework of man-nature and man-man conflicts and problems as they have arisen in the region. The framework was evolved in order to plan for the resolution of conflicts, since the conflicts between man and man, and man and nature are interlinked. The learning goals chosen were, therefore, in the context of a much wider understanding of objective conditions obtaining in the region with

- (i) children of marginal, small and middle farmers - the educational thrust was towards applying scientific techniques and planning for increased production;
- (ii) children of landless labourers - it was directed towards understanding wage and quantity calculations, price mechanisms in markets; and
- (iii) both groups - a more expanded world view built upon a materialistic explanation of phenomenon was an essential requirement.

Organisational Structure

The project is small, with Naura and his wife Anuradha forming the core of the team. It operates on a five acre plot of land which can support 20 workers round the year mainly through vegetable production activity. It is able to generate most of its running costs. All activities related to production are supervised by Naura. In addition, most of the non-formal educational activities have also been designed by him. Anuradha contributes through her participation in the formal and non-formal educational activities. The more advanced student workers help in the production activity by guiding the newer learners in acquiring skills and knowledge. They also conduct educational games and cultural activities, especially in the absence of the more experienced coordinators.

The experiment has no link with the formal system of education; it has a number of links, at an educational level, with many developmental problems of the region. The introduction of new techniques and scientific knowledge in agriculture is aimed at boosting agricultural production. There are many informal discussions on topics related to health, physiology and hygiene. These are pursued in order to create awareness of the social roots of many maladies and to encourage a more active response to problems of ill health. The importance of preventive health care over curative measures is also stressed. Diet and nutritional balance and control are emphasised, especially in the context of nature cure remedies which are cheap and easily practiced. Beneficial effects of fruit and herbs are explained, along with simple techniques to cure many minor ailments. Fruit and vegetable saplings grown on the farm by the learners are distributed amongst them so as to encourage the practice of diet control. A basic knowledge of the physiological and biological process is imparted in order to overcome the age old traditional practices which account for ill health through superstition. Ill health is often a primary cause of borrowing and consequent indebtedness. Further, the demonstration effect created by a model farm produces the conditions whereby other farmers are willing to experiment with modern farming.

Since the entire experiment is critically dependent on continued production, the problems of production demand immediate attention. Currently, since knowledge of production is restricted to one person, there is constant pressure on his time. Thus, the produce has to be marketed in a town, Anuppur, 9 kilometres away and since market prices of vegetables fluctuate daily, the marketing activity is also critical for farm economies. This leads to many coordination problems. Further, educational materials have to be constantly created and discussions guided so as to benefit the learners. Monitoring the link between production and evaluation also leads to coordination problems.

Non-Formal Characteristics

The most fundamental non-formal aspect of the experiment is its attempt to incorporate the educational process into the very existence of the oppressed. The real life situation of production provides the matrix for the educational process; it provides employment and livelihood to the learner, demands necessary discipline of the learner so much so, that in comparison, the discipline required for the educational process seems much easier. The stress is on the content of learning and its applicability to real life situations rather than the acquisition of degrees or credits. The gamut of learning ranges from physical exercises through educational games to cultural expression; both sexes participate in all the activities. Individual learners often find collective expression: there is one movie shown each month in the town nearby, preferably a movie which has some social impact on the learners. Occasionally, farm work is shelved in favour of a visit to a new place combined with a picnic. There is a great deal of scope for innovation and the development of a closer relationship between Naura and Anuradha, and the learners.

An Anecdote

Non-formal education can have its paradoxical situations too. For one monthly outing Naura took his learners to see a film. In this film the producer takes characters from the Indian epic, Mahabharata, and places them in a modern rural context to give the old good versus evil theme a contemporary twist. There is the young man who returns from the city chafing at the injustice he sees in the village. There is the bonded labourer who finally revolts against his bondage. There are the two brothers whose sister is abducted by the landlord. And there is the righteous younger brother of the landlord who is determined to see that the forces of good win after all. A pick-up truck was commandeered and all the learners went off singing to see the movie at the late night showing in a nearby town. It is difficult to specify what exactly they saw in the film and what role it played in their growing awareness but the trip back was full of animated discussion. And the next day all the learners did not turn up for work. They had, they announced through a spokesman, gone on 'strike'. A thoroughly disgruntled and discomfited Naura reluctantly agreed to a minor wage and bonus increase and the learners cheerfully came back to sing and dance at his door. Whether other real life situations would induce such cheer and whether other media will have similar correlatable impact are questions that further experimentation will have to resolve.

Economic, organisational and cultural difficulties arise from this approach to learning. Travel and entertainment place a severe burden on an overstrained farm budget. Remoteness of location poses difficulties of transportation. On the cultural level, the tribal heritage promotes a lack of curiosity; there is initially little interest in learning. This is especially noticeable in the girls, who come with a pre-conception that they cannot learn. Their initial

interest is therefore confined to earning wages. Then there are the difficulties of language and expression; segregation of sexes in work activity is found more acceptable than their integration. Girls marry early and are constrained to leave their families though they may have developed an interest in continuing their education. In addition, the tribal life style has not prepared the learners for regular attendance to either work or play; the habit is slow in developing.

Solutions to these difficulties have also been sought at the economic and cultural levels. A system of bonus has been introduced to encourage long-term interest in attendance. Thus, every day attended means an addition to the bonus stockpile, every day lost means a deletion of two days equivalent of bonus. For cultural involvement, interesting gains and variations are constantly introduced along with cultural activities like Karma (tribal dance). Constant rotation between the various production tasks is also done on a regular basis.

Community Participation

Community participation has been directed more towards learning than teaching. Middle and rich farmers in the surrounding villages are being attracted towards vegetable cultivation as they see greater cash benefits in comparison to cereal and traditional crop cultivation. They often visit the farm to learn, sometimes to advise, to share their experiences and to discuss problems related to production and marketing difficulties. Some have even gone to the extent of sending their sons and daughters to work on the farm in order to acquire the new techniques and practices. They have also started small experiments of their own to boost output from their farms. Learner participation is an organic part of the learning process since the learner has an active role in each of the activities.

When the Oraons first came to the Shahdol area, they were regarded as expert earth-movers. They could literally move mountains of earth to develop agricultural land or to reshape territory for mining and industrial operations. They settled near Naura's village and the first batch came to clear Naura's land of vegetation and to make it arable. They stayed on to learn about vegetable cultivation, to decipher the alphabet in the evenings, to read the clock for work timings, to add and subtract their wages and bonuses, to tape their songs in the new fangled machine that the 'mad' Naura carried around with him. Through their self activity, they helped Naura to develop the course content, the games, and the pedagogy. In the meantime their families had carved out small farms for themselves out of barren land in the interior. While the elders carted off the stones, felled the trees, and ploughed the soil on their own little plots, the children learnt how to grow vegetables on Naura's land. After two years this batch of learners left to make their own farms productive. Using the technology they had picked up, they gradually increased their surplus. And with the confidence born out of this surplus as well as with their native militancy sharpened by what they had learnt and observed in the educational process, they helped their families to resist the pressures of landlords and police, rich farmers and

cattle owners, officials and bureaucrats - all determined to dispossess them of the land, once barren, and now a source of food.

All production and marketing activities are generally supervised by Naura himself. The "formal" learning periods are shared between him and Anuradha, depending upon the constraints of co-ordination involved. Many of the detailed tasks in the fields are guided by the more experienced learner.

The Learning Situation

The more experienced workers automatically assume the role of teaching and guiding the new entrants into the learning process. However, the task of transmitting the more formal elements of learning (the 3 R's) is not yet generally observable in the learning process. At the moment, the ability to transmit knowledge of tasks is the main criterion in determining who is to instruct whom.

The farm is situated in a village with a population of approximately 1300, located 9 kilometres away from a small town which is a rail junction. The village consists of a mixture of tribal families, Muslim traders and agriculturists and both Muslim and upper caste Hindu landlords, rich farmers and middle-level farmers. The village is connected by metalled road to the town and is served by a number of private buses. The infrastructure available at the village level comprises a primary school without a building, electricity for pumps and houses, panchayat facilities and a mini public health centre in a smaller adjoining village.

The farm operates in all three seasons, so does the educational activity. The duration of the course is indefinite, varying with the individual learner's interest and the ability of the activity to provoke and sustain that interest. A desirable duration would be two years.

The Learners

The number of learners is about 24 per year. Most stay for two years but a few leave within six months, depending on various social and economic pressures - particularly the need to cultivate their own precious plots of land during the rainy season. The girls at a very young age move to other villages after their wedding. The total number of children in the village where Naura lives, in the age group 10-16, is a little over 100. Hence, in the restricted area, the experiment reaches out to approximately 20 per cent of the child population eligible for education.

The learners are encouraged to ask questions and to discuss issues amongst themselves and with Naura and Anuradha. Often native skills are brought to bear on tasks and advice is sought on local practices. The day's activities are planned in the morning through discussion

and mutual distribution of tasks. The older students generally enjoy the privilege of choosing their own tasks. The formal teaching sessions are held outdoors and timings often adjusted to suit mutual convenience. The weekly holiday is on the bazaar day, in tune with local needs and custom.

Resource Development

The learner is first inducted into tasks related to agriculture. This is necessary for two reasons: (a) to gauge whether the interests of the individual are confined to wage earning alone or whether there is also a desire to learn; and (b) to familiarise the potential learner in the initial period with the environment and the people there. In the second stage, interested individuals are drawn into the 'formal' educational sessions. In the third stage, the individual gets involved in discussions which range across a wide variety of developmental and social problems which may range from nutrition to harassment of village girls by the boys from the same village and other local issues. In the fourth stage, there is participation in cultural activities such as singing and dancing; the learner now feels at ease in the environment. At the present, the boys have shown an interest in learning about aspects of appropriate technology while the girls are interested in learning household related activities; but neither has yet been systematised.

Curriculum Development

The habit of planning and systematic execution of agricultural activity is reinforced through the use of drawings, charts and daily discussions. Thus a survey map of the farm demarcating the various plots acts as an aid in deciding what work needs to be done on which plot. Similarly, pictures and photographs showing the use of equipment are also being collected.

Instruction in reading, writing and calculation normally takes place in the mid-day break from work. Classes are held in the open air and the learners are provided with slates and pencils to practice letters, words and numbers. The words that are initially taught are related to the environment. In the next step, using the letters in the word identified, both learners and instructors go through the exercise of constructing more words that make sense. This helps in familiarisation with the script.

Education games are played in the evening after the day's work. These games are designed to promote the conscious intellectual activity of the learner, by immediately relating thought to action. What follows is a description of a few of the games:

- (a) All the participants stand in a circle and go through the motions of eating. One person standing in the middle of the circle calls out the names of various eatables; suddenly he will call out a word that does not relate to an eatable. Those who simulate the action of eating are then penalised for it.
- (b) All the participants jog in a circle, with one person in the centre calling out "how many boys, how many?" - to which the response is "as many as you want". Suddenly the conductor will say "three"; the learners have to then assemble in clusters of three and those who cannot form a group are penalised.
- (c) In the cultural sessions, the learners start singing local songs to the traditional music and beat. Then they are taught new songs with the same time and beat but with newer associations of ideas. There is an attempt to get them to start making their own new songs for a cultural troupe.

It is appreciated that the curriculum is being developed as the learning of the participants is progressing. If the pedagogic methods have to be applied for a wider clientele level, then books will have to be written for the purpose, systematising the various concepts being experimented with.

Learning Materials

The whole educational activity is being done with a minimum of materials which fall into four categories: (a) charts, drawings and pictures for agricultural activity; (b) a roll-up blackboard, a globe and maps for the classroom sessions; (c) a harmonium and a drum for the cultural sessions; and (d) a few special items such as a decile counter for teaching numbers and decimals. A major portion of the communication is verbal, drawing upon everyday observations and experience.

Except for the classroom sessions, the agricultural activity is partially decentralised and the cultural activity and educational games almost wholly decentralised.

Use of Media

Instruction and discussions are carried on in a mixture of Hindi and Baghelkhandi, the local dialect. The cultural sessions utilise the folk media, mainly musical. At a later stage, there are ideas of introducing the other folk arts of drawing, painting and clay modelling. As yet, the stage has not been reached where written material can be introduced. The classroom sessions make use of the few teaching aids such as the globe, maps and charts for the transmission of concepts.

Problems and Solutions

There have been difficulties in mastering the local idiom and recognising cultural patterns characteristic of the region. Accurate historical records are virtually non-existent. However, many of the difficulties of the experiment have to be viewed in the larger social setting of the experiment. These difficulties can be classified as:

- (i) economic - due to the paucity of resources and time that have to be divided between production and educational activity;
- (ii) cultural - arising from the non-acceptance of an "outsider", since historical experience tends to equate the outsider with the exploiter;
- (iii) social - other farmers view the activity and the activist with suspicion since they feel that the labourers are receiving too many facilities; they also look down upon any overt interaction with women; many difficulties arise out of the under-development of the marketing infrastructure.

Solutions to the economic difficulties have been cash crops for greater income, loans from banks for financing the development of the farm, emergency loans from friends, decentralisation of marketing of produce, credit obtained on the local market. As yet, the economic difficulties have not been overcome.

The cultural solution has been a clear personal involvement in economic, social and other relationships. Opposition from other farmers has been partially overcome by Naura's participation in the farmers' developmental struggles through the formation of a Farmers Committee which takes up with the authorities issues of bank credits, electric supply, market space, etc.

Financing and Costs

There has been no direct funding by any agency for the project. The seed capital for the experiment has been created from personal funds, with some contributions from friends. The shortfall has been made up by accepting crop and irrigation loans from commercial banks at market rates of interest. The capital input from all three sources is about Rs.50,000 out of which 60 per cent has been from private funds and 40 per cent from banks. Of this Rs.50,000, Rs.20,000 has been spent on developing two wells, the first of which was unsuccessful and had to be written off as a total loss. A significant portion of the development costs have been ploughed back from production on the farm; however, the experiment has not yet proved economically viable due to a variety of reasons arising out of the underdevelopment of the region. With such a structure of funding, there is no question of agency intervention in influencing the course of the educational

experiment, except in so far as banks demand repayment and levy penalties thus upsetting agricultural schedules.

Since the learners pay for themselves, the cost per learner is virtually negligible. In formal education programmes not linked to production, the opportunity cost of wages lost would have to be added to actual costs of teaching (teacher cost, materials and so on); thus Rs.4.00 of wages lost + Rs.4.00 of actual costs per day would mean Rs.8.00 per learner per day. In addition, these farmers have been contributing financially to the funds of the Farmers Committee which, through its activity, provides further social material for educational work. So far, the observable effects on the community indicate that the community has participated in learning. There has been no community contribution in teaching. But middle and poor farmers have been practicing new agricultural techniques and their behaviour patterns with labour have been changing with labour's increasing militancy. Almost every conceivable effort has been made to slash costs and to stabilise the economic base of the experiment. This has been necessary in order to develop the infrastructure necessary for uninterrupted production and education. This has meant tremendous hardship for Naura and his family. Natural calamities like drought and developmental conditions like subsoil water scarcity have added to the burden of unavoidable costs.

Continuing Education and Replication

Naura envisages that the time has come to institutionalise his experiment in the form of a "Shram Niketan" (Labour Institute) for the purpose of continuing education. The educational activity will be directed towards the two major sub-groups amongst the peasantry:

- (i) Peasant landholders who are interested in the development of agriculture in the region. The Shram Niketan will organise camps and training sessions dealing with intensive agricultural techniques, new crops, use of appropriate technologies in agriculture and so on. The trials of innovation techniques suitable to the region will be carried out on the farm before being introduced into the training sessions. In addition, the Shram Niketan will seek to develop as a forum in which a wide variety of developmental issues such as irrigation, land erosion and deforestation can be discussed. Financial help will be accepted from various government agencies operating at the local level who have schemes for the development education of farmers.
- (ii) Marginal farmers and landless labourers will stay and work on the farm which will be adjacent to the Shram Niketan. Issues arising out of production, literacy and the use of cultural and social media will form the main content of the educational programme for these sections. This activity will

be self-supporting, except for initial aid necessary for building up the minimum infrastructure for housing the learners and the educational materials for the programme. It is this latter activity that will deal essentially with non-formal education for the age group 6-16 years. Due to the novelty of the approach in the experiment, the question of replication can at best be in the realms of conjecture.

In terms of what has so far been achieved lie the seeds of the future. Let us see what sense we can make out of them:

- (i) A significant number of middle and rich farmers have to take to vegetable cultivation, realising the profitless economics of cereal cultivation. A small number of educated professionals and businessmen have shown an inclination towards purchasing land and developing it for agricultural use.
- (ii) The first batch of labourers, all of them marginal farmers from the Oraon tribe, have also taken a wet crop of vegetables on newly acquired and developed land. They have marketed their surplus produce and seem quite satisfied with the cash returns. What has been most remarkable is the jump from a traditional cereal crop, Kodo, to the stage of cash crop cultivation.
- (iii) Other tribal farmers (from Kol and Gond tribes) have sent their sons and daughters to work as labourers on the farm in order to acquire the new techniques.
- (iv) The older tribal students have expressed an interest in forming a cultural troupe which will hold musical performances in the neighbouring villages. They are now in the process of acquiring mastery over their musical instruments and their voices.
- (v) One tribal girl covered the equivalent of five years of formal education in a period of a year and a half. On her own initiative, she started teaching her younger siblings and the smaller village children in her home. However, this effect cannot yet be said to be a general phenomenon.

There are many unusual aspects of the experiment that may make replication of the experiment in another region difficult:

- (i) The experience and commitment which arise in this case from a twenty year history of involvement in social work institutions;
- (ii) Easy cultural acceptance by the non-tribal sections of the peasantry arises from the roots of a peasant background;

- (iii) The financial hardships inherent in the experiment if it is to maintain its organic link with the experience of the peasantry in the region;
- (iv) Uncertainties connected with the spread of the educational effect within a region; it is premature to comment about the spread effect at present.

If the work cannot be replicated, then those involved in the experiment would see no relevance in continuing it. The means to replicating it would appear to be by institutionalising it, but outside the formal educational system.

No one has been inspired to begin an educational programme of the same dimensions because of the tremendous energy required to run a farm as an educational-cum-commercial unit. But of those motivated by the general idea we can count:

- (a) a group of engineers running a mechanical workshop along similar lines in Shahdol district;
- (b) another engineer assisting a group of skilled workers to run a workshop-cum-polytechnic in Durg district; and
- (c) a lawyer who plans to run his farm on similar lines in Chindwara district.

Hopefully others would also learn from the experiment once it generates adequate experience through the Shram Niketan and gets to be better known.

In Shahdol district the work at Naura's farm is related intrinsically to the larger project of Environmental Education being conducted there by a voluntary group. The focus of the project is to educationally link together the various issues in the total environment (social, economic, political), particularly to the poor. Thus, the work of agricultural development is linked to industrialisation which, in turn, is related to ecology, employment, health, conservation of resources and so on, and the political decisions required to channel development into beneficial avenues. The underlying basis is that education begins from the work-place. In this sense, the only possible linkages with the formal education system lie either with the TTI (Teachers Training Institute) where teachers are being trained or with the socially useful productive work schemes in the schools and colleges. These linkages are at the stage of discussion and have not been formally made yet. One of the germinating ideas is an environmental study of the Sone river basin to be conducted by college students, the data from which will be fed into the formal environment-based courses like history, politics and geography.

Evaluation and Monitoring

As yet the modest scale of the experiment has not required any sophisticated system for monitoring. However, Naura has been engaged in a continuous discussion both with the learners as well as other concerned individuals in the area on the content and nature of his experiment. This has been a regular part of the conceptual framework itself trying to relate education to daily experience. Thus, much of the evaluative discussion takes place either at the farm itself with visitors who may be farmers, government officials, or social workers, or at the market place with other vegetable sellers, school teachers, and consumers. Through this evaluative mechanism, Naura has come to the following conclusions:

- (1) The labouring classes have adopted a defensive style of conversation in which their responses have no real meaning but are adapted to the oppressive situation in which they find themselves. This has become so ingrained that even amongst themselves their communication is restricted. The games, as part of the educational curriculum, help the worker learners to become more active and alert in their mental responses.
- (2) The physical training, apart from loosening up muscles and building up stamina, also imparts discipline and a sense of confidence whose immediate impact can be seen in the farm work.
- (3) This confidence is further reinforced by the fact that the workers go to work with copy books in their hands and are treated as equals by the coordinators, as mental and physical labour are given equal importance.
- (4) The cultural programmes have drawn in other workers from the nearby villages and there is the beginning of a wider network of communication.
- (5) The worker learners also interact with other real life situations outside the links of the farm, particularly in the market where they help to sell the vegetable produce. In the same market cloth, oil, salt, soap and so on are sold by merchants at exorbitant rates and these unequal rates of exchange become the subject of much discussion at the farm itself.
- (6) With the gradual increase in the confidence and abilities of the learners, they have begun to participate in decision-making roles on the farm and gradually Naura is finding more and more of his earlier responsibilities being decentralised leading to the hope that at some stage the Shram Niketan would become a co-operative endeavour not dependent on the capacity of a single dedicated and devoted individual.

In any case, Naura is conscious that a proper evaluation of this programme of non-formal education will be inevitable and possible when the effort has been institutionalised as the Shram Niketan. However, he feels confident that his present experiment has yielded valuable and sufficient data on the content of a non-formal educational activity.