

AMARPURKASHI VILLAGE DEVELOPMENT PROJECT

A report on a visit to APK; November 1977

by Sedley Sweeny

INTRODUCTION

I had known Mukat Singh for a number of years and was impressed by his Village Development Project and by his own enthusiasm and sincerity. But, having seen several projects in India, I was reluctant to commit myself to positive support until I had seen his work on the ground. I was therefore delighted when, on a visit to my smallholding in December 1976, he invited me to come to Amarpurkashi. My previous work in India had been with Tibetan refugee children; I had not lived in an Indian village nor had I been able to look closely at Indian agriculture. Later, when I organised and ran the Tibetan Farm School in Wales, I did so in the instinctive belief that whatever the difference between Welsh and Indian conditions, the principles of good soil, crop and animal husbandry were universally the same. In this belief I was often criticised by those who said that nothing I could teach in Wales would have any relevance in India. Now was my chance to find out.

I arrived at Amarpurkashi on 9th November and stayed for two weeks. Originally I had planned to stay longer, but for various reasons was forced to shorten my stay in India. Nevertheless I was able to look closely at the people, crops, animals and at the various projects planned or already operating. I also had long discussions with Mukat on the social and political life in India, its effect on the lives of the villagers and on his own aspirations and achievements. As he clearly pointed out, many Western observers think only in terms of positive plans and projects against a background in their own countries and fail to grasp the significance of the enormous additional problems of the developing world in general and of India in particular. At first I was impatient when Mukat countered my suggestions with the snags and difficulties, as I was when he spoke of his plans to hold protest meetings and marches whenever bureaucracy or corruption threatened the wellbeing of his villagers. Although I still think that to some extent I was right — battling against others is a negative and destructive occupation — it is also true that unless the evil forces of corruption and obstruction can be controlled, the effort put into projects will largely be wasted. This, in a nutshell, is the problem of India (of which more anon); a problem that had made many Western wellwishers, as well as educated Indians, turn away in hopeless frustration.

In the end I was forced to agree with Mukat that India cannot be written off unless at the same time one abandons hope for the world. This conviction has led him and his brave Australian wife to give up secure jobs in England and devote the rest of their lives to improving the lot of India's half-billion villagers. Such vision, courage and determination must be supported, whatever the risk of disappointment and failure.

THE SETTING

November in Northern India is very pleasant. The monsoon is over, the ground is still green and the air warm by day and refreshingly cool at night. The villages nestle snugly amidst neatly managed fields of sugar cane, millet, sorghum and potatoes, giving an appearance of tranquil prosperity to the casual observer. I was filled with a feeling of timelessness in an unchanging and unchangeable India. For all the luxury hotels in New Delhi, the buses and lorries, State airlines and steelworks, atomic power and chemical plants, the new tractors and implements with such limited life-expectancy, life within the village goes on as it has for centuries; slowly, patiently, obedient to the demands of the seasons and the caprice of weather, official and moneylender. Half-a-million villages containing practically the whole population of the country still toil endlessly to keep body and soul together; to save enough of their produce from drought and flood, from tax collector and middle man, from decay and predator to fill their bellies and raise their children. On the one hand the earth seems so rich and productive, on the other the people are so poorly nourished that it is a wonder they have the energy to continue the struggle.

Amarpurkashi village contains some 100 families; about 700 souls in all. The houses are mainly of mud with one or two small rooms and a tiny kitchen, and are surrounded by small courtyards in which the animals are tethered and fed. A few of the streets are bricked and wide enough for a bullock cart to pass, the rest are narrow and mud surfaced with open drains from the houses and cattle yards. Around the edge of the village are three ponds into which the drains discharge. Some houses have wells with pumps, others rely on communal wells; very few are connected to the electricity supply. There are richer villages in the Punjab and elsewhere, but there are also many which are much poorer. Amarpurkashi and the surrounding villages which make up the Project can fairly be described as typical insofar as the standard of living and health of the nation is concerned. But in one respect they are far from typical, for they have within them a new spark of hope, a new awakening to the possibility of better times to come. This new light stems from Mukat Singh's imaginative Village Development Project on which he has devoted all his energy and resources for the past seven years.

THE LAND

The soil is strong clay-sand mixture of great depth overlying an excellent water table. The surface is mainly level and 75% of the land is irrigated from Government and private tube wells plus a number of private open wells with bullock-driven bucket pumps. The soil is inherently fertile although the organic

content plus micro-fauna and flora shows signs of depletion. The land is divided into a large number of small plots; a typical family farm consists of about 3 acres divided into 7 or 8 plots which may be scattered. Two crops may be grown in one year on the irrigated land; one being harvested in November (mainly rice, sugar cane and pulses) and the other in May or June before the monsoon.

THE CROPS

Almost any crop will grow and ripen well in this area, and it appears likely to me that even on the very small family farms it should be possible to feed the people extremely well and still have surplus produce to sell for those necessities unproducible within the group of villages. As it is, about 75% of the land is growing sugar cane for sale to the local plant where prices are uncertain, to put it mildly. Rice, millet, sorghum, wheat and barley are the main cereals; a variety of pulses provide protein food, and vegetables include potatoes, cauliflower, radish, tomatoes, aubergines, leaf vegetables (spinach), marrows and melons. Mustard and oil-seed rape are grown for oil. Ground nuts, butter nuts and water nuts are also produced as is a little jute for rope making. Chillies are grown for spice and local fruits include Jackfruit, mangos and bananas.

Crops are rotated to some extent, but the preponderance of sugar cane limits the full development of alternate cropping with cereals and pulses, brassicae and roots.

The exact extent of cash-cropping is difficult to ascertain. In 8 families surveyed this varied greatly; some consuming most of their own crops (except sugar cane) others selling practically everything. I think it is true to say that the villages as a whole are committed to a cash economy and their agriculture is designed to make money as the first priority and to feed themselves as the second.

The crops suffer from a variety of pests and diseases, and the use of pesticides is encouraged and increasing steadily. There is also a growing use of chemical fertilizers in conjunction with irrigation and 'improved' seed to grow the weightier crops which make up 'the Green Revolution'. That this scale of cropping draws heavily on the humus resources of the soil as well as on the minerals cannot be in doubt, and it seems likely that this depletion is reflected in the inability of crops to withstand disease and predators. Unfortunately a great proportion of the cattle dung is burned as cooking fuel and does not find its way back onto the land except as ash. Some farmers do make a little compost in pits using the cattle dung during the monsoon when it is too wet to make into cooking fuel. These pits do not seem to be very well built or aerated, but do provide a limited amount of humus for nursery beds.

THE PEOPLE

The villagers live in 'extended families' on average about 8 persons to one house. Parents and grandparents, children and grandchildren, in-laws and others make up some of these families. Infant mortality is high; in the worst case a woman had one survivor out of 19 children born! Child marriages are still common and many — but not all — of the women are still in strict purdah. Domestic work and care of buffaloes is done by the women, cultivations and care of the bullocks by the men. Threshing, winnowing, gleaning and grinding of corn and chaffing of straw are shared by both sexes.

Within the villages there are some very competent craftsmen: carpenters, wood turners, blacksmiths, wood carvers, mechanics, wheelwrights and tailors. Their skill is the more surprising in view of the almost complete lack of proper tools, most of which they make themselves. Their ability to improvise is astonishing.

The health and general physique of the people is far from good. An apparent shortage of first class protein results in poor development from childhood onwards, and the people are very susceptible to a number of diseases including malaria, typhoid, TB, dysentery, skin troubles and 'fevers'. There must be a considerable natural immunity to many diseases as a result of the lack of hygiene and facilities, but I expect that several diseases are endemic and cause a degree of disability without becoming acute.

Medical services are minimal and doctors often not qualified. The policy regarding infectious diseases (eg Typhoid) is crude but realistic: '... we treat the patient with medicine but have no facilities for protecting the others'.

Apathy is the greatest problem, and this is what Mukat and his wife are struggling to overcome. Too often the villagers have been promised a better deal by the Central or State Government, but 'many's the slip twixt the cup and the lip', and the attitude is 'I'll believe it when I see it'. This has gone on for so many generations that it is difficult to arouse interest in any new idea. Nevertheless, there is a stirring amongst the people of the Amarpurkashi group of villages and the Project has made some progress, albeit with disappointments and failures as well. Probably the only way to stir the imagination is to show, by example, a better way of farming and living and a better understanding of nutrition and health. This is long-term education in its truest sense and requires great vision, wisdom and endless determination. It can only happen in a community blessed with a leader like Mukat Singh. Such men are rare, and it may be argued that their contribution is but a drop in the ocean. But if, in his lifetime the 'yeast' of his vision can leaven ten villages and bring them to a higher plane of life, others might begin to follow that example. It will be a long haul indeed!

THE ANIMALS

An average family of eight might own four or five cattle, both buffaloes and cows. The castrated bullocks of both breeds are the main source of power for tillage and transport and still work the bucket lifts at the open wells for irrigation of the land. The implements they draw have changed little over the centuries. The wooden ad and plough with locally forged iron share, the timber beam 'leveller' and the universal ox-cart are to be seen everywhere. An occasional ox-cart mounted on rubber-tyred lorry wheels and a few animal-drawn disc harrows are the only 'modern' innovations used by the majority of farmers.

Now and again one comes across a well-grown pair of bullocks in reasonably good condition; the sign of a well-to-do, enlightened farmer. Most of the cattle, however, are under-sized, painfully thin and weak. Through lack of protein they develop very slowly; a two-year old cow often being no bigger than a 6-month old Jersey heifer in Britain. Most of the cattle are fed on the chaff of rice straw, millet and sorghum stems plus a little dusty creeping bent grass that grows by the roadside and perhaps the leaves from the branch of a tree. Enlightened farmers might add some oil-seed cake and add a little sorghum meal,

but the general level of nutrition is appallingly low.

Milk yields reflect the level of nutrition, buffaloes generally giving more than cows. The potential yield of these cattle is probably low compared with European animals, but it is quite wrong to suggest that improved breeding would increase production so long as the farmers do not understand the principles of animal nutrition (or are unable to afford proper fodder).

A few farmers keep goats which seem to thrive better than cattle in local conditions, but even they are hardly show specimens. Even fewer keep pigs and these are of a very poor quality. As far as I could ascertain the vast majority of the people of these villages are vegetarians, and one can see little economic value in the many 'dry' cattle kept by the villagers. These all eat the limited food and keep the rest from growing to their full potential. There are long-standing religious traditions which make it impossible to alter this situation; what is more, the majority of the cattle are owned by independent individual small farmers and it would take more than 'high level policy' to make them change their ways.

A large number of semi-wild dogs inhabit the villages, many of them in dreadfully poor condition. Whilst I was there one teenage boy died from blood poisoning from a dog bite; not the first time this had happened.

A few frge-range chickens pick up what they can about the village, but do not lay many eggs.

THE DEVELOPMENT PROJECT

The Indian Government 'Block Development Scheme', started shortly after independence, had substantial initial success, particularly in the development of tube wells, canals and irrigation as well as in the building of accessroads to villages which were formerly cut off completely during and after the monsoon. But more recently the scheme has not been a success for the following reasons:—

- The standard 'Block' of 100 villages was too large and unwieldy.
- The Block HQ setup was too remote and unrelated to the village situation. The HQ Staff were townsmen who did not care for village life.
- Block boundaries were political instead of rural/geographic.
- The scheme was too rigid to allow for varying village situations.
- There was lack of commitment (after initial enthusiasm and success) amongst Block Development staff.
- Help under the scheme went mostly to the better off and bypassed the poorest who became even poorer and more frustrated.

The ultimate success of any development scheme must depend upon the involvement and enthusiasm of the villagers themselves, but the level of Block Development thinking is too abstract and remote to stir the imagination and overcome the apathy of the poorest people. Likewise, the State education system, with its emphasis on paper qualifications and status does not fit people to face the real problems of village life.

The Amarpurkashi Village Development Scheme, founded by Mukat Singh differs from the Government 'Block Development' as follows:—

- The scheme embraces 10 villages with common interests.
- The villages were chosen because of their natural and mutual attraction to Amarpurkashi (which is

- centrally placed adjacent to the main road). The education offered (apart from the Government primary school) is designed to stir the imagination and awaken the realisation that there is hope of better standards of life and health, and to demonstrate how these aims may be achieved.
- Every effort is made to ensure that the advantages flowing from the project shall be enjoyed by *all* the villagers, and not only those already better off.
- The education and training is primarily intended for the inhabitants of the associated villages, but provision is made for training selected outsiders in order that the concept may spread to other groups.

The following projects have been started under the Scheme:—

- The Junior High School has more than 120 enrolled. The syllabus follows the U.P. standard courses, and there is additional instruction in gardening and plans to include some manual skills to fit the students for village life. Great efforts are made to open the eyes of the children to the possibility of creative thought and to wider horizons.
- The Amarpurkashi Agro-Industrial Polytechnic has been designed to provide discussion forums and practical training as and when the need arises. It does not work to any fixed term or syllabus. It is hoped to equip the Polytechnic with its own workshop and with tools for carpentry, metalwork and electrical work. During my visit to APK, one general course was planned for students from outside the Project. The idea was to combine lively discussions with practical training and tests to foster initiative, leadership, observation and practical manual work as well as to introduce the principles of farm husbandry and nutrition. Some 20 students were enrolled, but in the event only 2 turned up. The instructors were given some preliminary training (with my help) before the students arrived, but the course never got going whilst I was in the village. As this happened at the same time as Mukat was taken ill with suspected typhoid, it is hardly surprising that the course was not a success, but I must say that the syllabus had not been planned right through and I feel that the course might have been rather a 'hand-to-mouth' affair. Once the Polytechnic has its own building and workshop facilities, it should be easier to plan a thorough practical course.
- The Children's Centre has been temporarily closed because there is no volunteer to run it and it has not been possible to recruit a suitable local girl. Apparently any suitably educated girls are married and convention does not allow them to go out to work. Efforts are being made to recruit a new volunteer from abroad, but it strikes me that in the long term the Centre should be run by a local woman.
- Agro Hires. The Project has one good workshop which is used mainly for tractor, diesel engine and implement maintenance and repairs. It also doubles for practical instruction when Polytechnic courses are run, but is not properly equipped, nor is it roomy enough for the latter use. The 4-year old Zetor tractor has been off the road for some months awaiting a new tyre and

general overhaul. It is in very poor condition largely due to lack of proper maintenance, and I do not expect it will do much more useful work. The new Massey-Ferguson tractor (made in India) had done less than 200 hours work at the time of my visit, but was already showing signs of wear and damage. Fortunately I was able to write down and give practical instruction to all the drivers and mechanics in daily, weekly and monthly maintenance and am certain that they can do all the tasks perfectly well if adequately supervised. There are two young men on the Establishment who hold degrees in agriculture; Indal Singh Bhadoris (Mukat's Deputy) and R.B. Pandey, the Agricultural Adviser. Between them it should be possible to arrange strict supervision. The tractors are equipped with disc harrows, spring tine cultivators, leveller board and a trailer. Although the M-F 35 works regularly in the fields on hire, I am doubtful if the tractor hire service will ever pay for the fuel, oil, repairs, replacement parts and tyres as well as depreciation (which must be allowed for at not less than 25% per annum) and driver's and mechanic's wages. If all these costs were truly reflected in the hire charges, few if any of the farmers would afford the luxury of tractor work, and once again it would be the poorest who failed to get the advantage of the service. The diesel pumping engine hire service, on the other hand, seems to be doing well. The operators and mechanics know the engines completely and are able to do complete overhauls with the tools at their disposal. Of 7 engines owned by the Project, 4 were in working order and three being overhauled. These simple engines are mounted on bullock carts and are in regular use throughout the group of villages. The animal drawn disc harrows are also provided by the service. These, like the tractor-drawn discs and cultivators, tend to be used until they break down without much maintenance or greasing; a habit I have observed at home as well as in India!

- e) Fertilizer Agency. This was started when fertilizers were scarce and getting into the hands of the wrong people. It successfully corrected this wrong. Recently, however, the Government has subsidised fertilizers, the import duty has been removed and co-operatives have been set up which allow farmers to borrow the cost of fertilizers against their future crops. The APK Fertilizer Agency has therefore closed down and confines its activities to keeping an eye on the fair distribution by the co-operative. The escalating use of fertilizers and pesticides by farmers who know little about their long-term effects or the possible dangers is, in my opinion, a matter of great concern.
- f) The Farmers' Consultancy Service is run by Mr. R.S. Pandey, BSc(Agric). He has a good conventional knowledge of the theory of agriculture and the beginning of some ideas of the value of humus in the soil. I was not able to see much of his work during my visit as he was engaged in preparing for the Polytechnic course that failed to materialise.
- g) The Milk Collection Centre. This service seems to have improved the price the villagers in the three villages concerned get for their milk. There has been talk of improvement of cattle breeding

to increase yield and profit, but I am convinced that the first move should be to teach the farmers how to rear their calves and feed their milking cattle. Until they know how to make the best of their existing stock, there is no point whatever in thinking about breed improvement; indeed any premature attempt at such would end in very expensive failure. Like the better seeds of the Green Revolution, better cattle require much heavier and more expert feeding and management, and would die in conditions that the indigenous scrub cattle can tolerate.

- h) The cattle and vegetable market scheme was launched too soon and with insufficient preparation and experience. There was jealousy and fierce competition and the villagers did not understand the idea of competitive cattle showing. This project has been abandoned.
- i) The Hoffman Brick Kiln was built by Mukat Singh as a private venture in 1970. Due partly to faulty construction, partly to late delivery of fuel, partly to incompetent handling of the flues, but mainly to the very early onset of the monsoon, the first firing was a failure and a substantial part of the kiln was washed away. There has since been a concerted effort to get support for the training of an operator and the rebuilding of the kiln. This was nearly achieved with the promised support of the I.T.D.G. and Christian Aid, but due to several factors beyond the control of Mukat Singh, these plans collapsed and nothing yet has been done. There seems very little doubt that a Hoffman kiln, properly constructed and skilfully fired would turn out better, cheaper bricks than the traditional Bull's Trench kilns which already operate every few miles along the main Moradabad-Chandausi road. If it were not expertly run by a well trained operator it would almost certainly be another costly failure.
- j) The Farmers' and Labourers' Organisation is designed to act as a Union to stand up for villagers' rights against exploitation and corruption. Under the leadership of Mukat Singh it has had some success, but still has a long way to go in rousing the poorest people to feel that they have any chance of standing against the stronger forces that exploit them. Nevertheless, it is a start, and is having some effect.

SUGGESTED PROJECTS:

- a) Small Industry Project. At the request of a Tibetan ex-pupil now farming in Maharashtra, I took a hand-operated seed sowing fiddle to India. At Amarpurkashi I showed the workshop staff and a local carpenter how to copy it. Together we made three copies and carried out a successful demonstration of sowing wheat and compound fertilizer. This implement, very cheap and simple to construct, is most suitable for Indian conditions. The market for it is wide open and with proper promotion and a well organised simple assembly workshop, it should be easy to start a very lucrative cottage industry. The capital cost would be far less than replacing the worn out tractor, and the chance of the project succeeding much greater.
- b) Food storage is a very great problem in India. Weather and predators destroy nearly half the food grown. I suspect that much valuable food grown in the villages is sold in the towns (rather

than eaten by the villagers) because it is not possible to store it safely in the villages. Considerable work has been done in China and in SE Asia on design and construction of ferro-cement food storage bins and silos. The techniques are suitable for village workmen although skilled supervision is required to ensure good quality work. Designs and techniques are available in an excellent publication by the national Academy of Sciences, Washington, D.C. 'Ferrocement: Applications in Developing Countries', (sent free on request). This is a skill that might be taken up by the APK Agro Polytechnic to great advantage of the village group community.

SOME OF THE PROBLEMS

The new Janata Party Government has adopted a policy based on 'Small is Beautiful' and promised to support small-scale agriculture (there is virtually nothing but small-scale in India) and village manual crafts. This Gandhian policy, if it can be achieved, is exactly what the villages need to bring about the radical change that alone can save the masses from disaster. To promise is one thing; fulfilment will certainly prove much more difficult. In the first place, Indian industry and big business saw immediately that heavy investment in agriculture and cottage industry would mean much less for them. How could they maintain industrial growth, exports, balance of payments, employment? There will certainly be heavy pressure on the Government to compromise. Second, there is the 'immovable middle', that mass of administrative civil servants at every level from Central to State Government, to District, Teshil and Panchyat. These 'faceless' men, with notable exceptions, are well nigh impossible to pin down, unwilling to make any decision that might put their jobs at risk, completely out of touch with real problems and out of sympathy with poor people, are generally lazy and too often corrupt. By the time the Government's intentions have filtered down through them, they bear little resemblance to the first inspired ideas, and the investment will already be sadly dissipated. Finally there are obstacles within the villages themselves. Selfishness, jealousies, nepotism and corruption exist there too. It would take an army of Mukat Singhs to keep tabs on every individual who might try to obstruct or make off with more than his share of the booty. The problems can hardly be over stated. They are enormous.

THE WAY AHEAD

The aim of the Amarpurkashi Village Development Project is to improve the lives of the villagers in the group, and, ultimately throughout India. From the material point of view this means improvement of health from better nutrition, hygiene and general living standards. From better health will flow the energy and drive needed to promote imagination, initiative and to overcome apathy. Only when morale is thus raised will it be possible for people to develop their full spiritual and cultural potential.

The land is good, and can provide the health-giving nutrition required by man if man will, in turn, provide the earth with the nutrition it needs to foster its own life and health. The whole process is a cycle of life in which the waste products of man, animal and plant must be carefully returned to the soil, which, in its turn produces healthy plants on which healthy animals and healthy men may be fed. In

recent years man has tried to short cut this cycle by direct feeding the plants by chemical fertilizers. Like a man seeking strength through the whisky bottle, this process shows remarkable effects in the early stages, but sooner or later, the side effects begin to show. More direct 'feeding' is required to produce the same effect, biological balances are upset and the soil and plants become sick; finally a state is reached where a cure is extremely difficult if not impossible. The nutrition of animals and men by means of sick plants gradually brings on lack of vitality and increasing sickness in man himself.

There is a school of thought that suggests we are in such dire straits today, when population is rapidly outstripping resources, that we cannot afford the luxury of quality food, but must increase quantity at any cost. This policy might work for a generation (albeit with devastating effects on the health of mankind) but in the long run does not face up to the needs of our successors. Mankind is selling the future for the needs of today.

The policy of the Government of India is to support village agriculture and small cottage industries. This is excellent as far as it goes. But unfortunately it has not faced up to the full implications of the 'Cycle of Life' and the fact that true health can only issue from a healthy, living soil. The principles behind this concept of health are very clearly set out in the works of two great men, both of whom developed their philosophies and practical systems in India. The late Sir Albert Howard's 'An Agricultural Testament' develops the concept of the living soil and its effect on the health of plants in arguments of inescapable logic. The late Sir Robert McCarrison in his book 'Nutrition and Health' describes his work, spread all over the Indian sub-continent, in which he proved beyond any doubt that nutrition and human health are inextricably linked, and that the health of the food and, indeed the health of the soil on which it is grown are every bit as important as the items of food themselves.

It is extremely difficult for a small village community 'to go it alone' and fly in the face of Government and generally accepted agricultural policy, even when the villagers know that the policy will ultimately lead to disaster. Nevertheless, a growing number of enlightened people are striking out on organic lines with remarkable success. The task is difficult but not impossible. By starting in a small way and working forward step by step, a community can make the change. But it requires courage, determination and strong discipline.

It seems to me that two major changes are needed in Indian farming today:—

1. To get back to a basically organic system of husbandry where the maintenance of the health of the living soil is the foundation on which everything else is to be built. This cannot be done on any long-term basis with chemical fertilizers and pesticides. The use of lime and basic slag as and when specifically needed is not ruled out. These are soil conditioners which regulate pH (acidity) and encourage the formation of nitrogen-fixing nodules on legume roots as well as encouraging soil life. They are not direct plant foods. The most potentially dangerous fertilizers are the direct-feed nitrogen chemicals which force rapid plant growth which burns up the soil humus faster than Nature can replace it, and can seriously reduce the useful living organisms in the soil. These and pesticides are at best makeshifts to provide plant foods which a dead soil can no longer supply and to hide the symptoms of pest and disease which are

themselves an indication of bad husbandry.

2. To change to an economy where the production of high-quality, health-giving food for use in the village is the top priority, and the growing of cash crops for sale is at all times second to the growing of food to eat.

Which of these changes presents the greatest difficulty is hard to say. Both of them involve a complete break with generally accepted practice and Government policy. I do not suggest that anyone should try to change overnight. It would be wise to start on a very small scale with limited experiments carefully carried out. Then one can build on one's successes and move step by step to greater changes. In the case of Amarpurkashi I would suggest that Mukat Singh, as one of the larger and more secure farmers in the group, should make the change over a period of five years with the aim of becoming a model farmer in self-sufficient smallholding with surplus produce for sale to meet the cash needs of his family. Others would be sure to follow his successful lead.

The gradual changeover must be accompanied by education in nutrition which will be very difficult in the conservative and prejudiced conditions of village life. The present malnutrition and poor physique of the villagers will only be improved when the people realise that they must start by rebuilding a healthy, living soil on which they can grow healthy, health-giving crops, which, in turn, they must learn to harvest, preserve, prepare and eat in the right proportions. This is a major enterprise in real education which might form the basis of courses in the Junior High School and the Polytechnic. All other awakening and enlightenment on the social and political planes is really a waste of time if the people continue to be badly fed and of poor physique.

PRIORITIES FOR SUPPORT

All my experience with the problems of the developing countries leads me to believe that in the long term the only true and worthwhile help is that which the people themselves provide from their own efforts. Any sustained aid from outside makes the recipients more and more reliant on hand-outs and less able to stand on their own feet. This tendency is compounded when aid takes the form of advanced technology involving high capital investment. This is not to say that advanced technology should be denied to developing countries, but merely that they should achieve only through their own efforts and feel responsible for putting aside sufficient capital to repair and replace it as it wears out. In the case of Indian villages the move towards Western standards must needs be slow if it is to be self-financed. I believe that outside help is essential in the early stages, but that it should be limited to 'pump-priming' support for low cost enterprises which have a good chance of success, using the skills available within the community concerned; or to strictly time-limited aid in the payment of teachers' salaries etc until the whole project is ready to take over the responsibility. Only in cases of extreme destitution or misfortune should outright non-productive donations be made.

I must end by re-stating my conviction that the principles of good soil, crop and animal husbandry are universally the same. Nothing I saw in the Amarpurkashi village group in any way alters my view; indeed I am more than ever convinced of the truth of this statement.

FOOTNOTE

Mukat Singh was born the son of a poor farmer in Amarpurkashi village in U.P. His achievements in secondary school and university were entirely the result of his own determination and effort. Some eight years ago he and his wife gave up secure and well paid teaching jobs in England in order to return to his own village to help his people. From the beginning it was his ambition that the Amarpurkashi Village Development Scheme should become self-supporting and not rely on aid from overseas. He made great efforts to raise support in India to get the project launched, but in the end was forced to look abroad to Australia and Britain. A typical example of his dilemma is the Junior High School which was built and is run with funds that have been raised abroad. The school is recognised by the U.P. State Government who have praised the standard attained, but have completely failed to give any financial support.

Major S.B.I. Sweeny,
Brynoyre,
Talybont-on-Usk,
Breconshire.

AMARPURKASHI VILLAGE PROJECT

P. O. Bilari, Distt. Moradabad, U. P.

Implementing Agency

THE SOCIETY FOR AGRO-INDUSTRIAL EDUCATION IN INDIA

(Registration No. 799/69-70, U. P. Societies Registration Act. XXI)

PROGRAMMES IN PROGRESS

1976

1. AMARPURKASHI AGRO-INDUSTRIAL
POLYTECHNIC

Founded in September 1970, the Amarpurkashi Agro Industrial Polytechnic is a new and unconventional kind of rural polytechnic, remarkable for the fact that it does not run courses on a set, term by term basis, but only when there is the demand and facilities for particular courses. Another unusual aspect of this polytechnic is that all courses are planned with the co-operation and advice of the students themselves, and no course is regarded as finished at the end of the formal study period; rather a continuous follow-up programme is considered of prime importance.

In 1975, the courses included a Project Worker's Course, run from 15th-30th May, for both the workers of our own project and others wanting to start new projects in other areas. The course began with a seminar and then went on to practical work which involved personal contact with the farmers of the area, in the final stage of the course, trainees were given individual projects to complete.

From 18th-22nd October, a Youth Orientation Programme was run to bring together the semi-educated youth of the neighbouring villages and encourage an open discussion of their problems. The free and frank discussion of problems of employment and careers proved a very rewarding experience for the thirty rural youths who attended.

From 26th Dec.-1st Jan., a work

and study camp was held in co-operation with the Delhi branch of the Service Civil International. The aim was twofold; to bring together city and rural youth; and to combine work and study. The campers built soak pits for a well and for house drains, cleared the compound of a village temple, and repaired village roads in one of the project villages. In the study programme they discussed such topics as "Education and how to reform it", "Ruralisation versus urbanisation" and the "Amarpurkashi Project".

Since the engines were acquired by the Agro-Hires, regular courses on "Diesel Mechanics for Farmers" have been run. In 1976, there have been a course on Youth Orientation and Vocational Guidance, Staff Orientation and Training and a highly successful Village Leadership course held on the banks of the Ganges at Rishikesh.

2. KRISHI AUDYOGIK JUNIOR HIGH
SCHOOL

This school was founded in July 1971 with a dual purpose - to meet the local demand for a good, conventional type school, and to provide a testing ground for new educational ideas and methods. Thus the school has to keep to the programme of instructions approved and issued by the State Education Department of U.P. It has been given permanent recognition by the U.P. State Government and is trying to get on the aid list; at the same time experiments and improvements in the methods of teaching and disci-

pline has resulted in our students being unusually bold, vocal, enterprising, receptive to new ideas and full of initiative and confidence. Visitors to the school are always pleasantly and unexpectedly surprised by the students' quick and lively response to their questions.

Contact with interested people abroad has enabled us to institute a system of scholarships both for poor and for brilliant students. These are given on a yearly basis and generally cover the students' fees and stationery expenses. In some cases, clothing allowances are also given. Recently a survey was carried out to find out what sections of the community are using the school most, and it was most interesting and gratifying to discover that 43% of our students come from families owning less than 6 $\frac{3}{4}$ acres of land. At present 173 students are on roll, coming from the various project villages.

In 1972, the school received permanent recognition and yet four years later, we are still waiting to get on the aid list. Inspectors have visited the school and invariably been full of praise. Why then does the aid remain beyond our reach? Because we refuse to stoop to the corrupt practices other schools are forced to adopt in order to get aid from the notorious education department.

3. BALKENDRA (CHILDREN'S CENTRE)

Originally opened in December 1973, this unique centre caters for children of pre-school age and all girls who are not sent to the local government primary school. Last year, a second class was also begun for older girls to learn sewing and other useful household crafts.

The Centre uses entirely modern and unconventional methods and consequently is something of an enigma to Indian visitors. The children follow a daily programme of creative activities using chalk, pencil, paint, clay and scissors; games; a snack that is both cheap and nourishing; and a free play

period. No strict guidance is given in the creative activities; instead the children are encouraged to use their own imagination and initiative in drawing, painting and modelling. In the summer months, there is a weekly bath day with soap and towels provided. A manual flush toilet has recently been built in the school yard, and the small children are trained in its correct use.

It has been interesting to note that after a year or so in the free and stimulating atmosphere of the Children's Centre, the children become eager to go on to conventional schooling and are much more willing to enter the local primary school and learn reading and writing.

4. AMARPURKASHI AGRO HIRES.

Aiming at providing essential services for the local small farmers, this has proved the most popular of the project activities. Begun in March 1972 with a Zetor 2011 tractor, it now includes a thresher, trailer, cultivator, disc harrow and leveller, as well as several bullock-drawn implements, a plant protection sprayer and four diesel engines. In this area, all the holdings are small so that personal ownership of a tractor is quite uneconomical. On a no-profit, no-loss basis of hire charges, the service caters for even the smallest of local farmers, who find that the tractor supplements rather than replaces bullock-ploughing, particularly in sugar cane fields.

Unfortunately, despite its popularity, the agro-hires has not been running economically. This is because trained and experienced staff have not been available and so staff have had to learn on the newly acquired equipment. The equipment has suffered considerably as a result. We hope to replace the tractor soon with a new one and then hopefully the service will run more efficiently.

5. WORKSHOP

Newly opened in 1975, the work-

shop aims at providing a reliable and reasonable repair and maintenance service for diesel engines as well as a practical training ground for polytechnic students. Though running quite successfully to date, the desired expansion of the workshop has been delayed by the difficulty in getting trained staff.

6. FERTILIZER AGENCY

The Society managed to acquire a licence for a sub-agency for fertiliser in June 1973 and since then has been selling it to the farmers of the project villages at government controlled prices. Generally speaking, this is a popular and successful facility but it is sometimes severely hampered by the fact that the monthly quota frequently does not arrive on time or arrives at a time when the farmer does not arrive on time or arrives at a time when the farmer does not need fertiliser and not at the time he does; some times the store is full of fertiliser and the farmers do not have the cash to buy it; recently the prices have been changing and we have been caught with old stock bought at higher prices and rendered virtually unsaleable by a sudden cut in price. At present, there is a good supply of fertiliser available and prices are lower than they have been for some time, so the agency is running well.

7. FARMERS' CONSULTANCY SERVICE

A qualified agriculturist has been working for the project since November 1971, when an overseas organisation agreed to pay the salary of an Indian agriculturist for as long as he could be usefully employed by the project. This service is a means by which contact can be made and maintained with a large part of the village population, through personal relationships with advice on seeds, fertilisers etc. and crop demonstrations and through fairs, exhibitions and education all programmes. Obviously, an agriculturist with plenty of initiative and imagination is required, and such people are not easy to get. However, we have had good staff so far, though unfortunately they are

inclined to leave after putting in a year's good work, the experience and knowledge they gain here enabling them to get much better jobs elsewhere.

LOCAL PROGRAMMES INITIATED BY THE PROJECT

1. Milk Collection Centres and Milk Producers, Co-operative Societies have been established through the efforts and encouragement of the project, in Amarpurkashi, Khanpur and Mohammed Ibrahimpur. These buy milk from the locals at a good price based on fat content and sell it to the nearby Dalpatpur Infant's Food Factory.

2. Gramin Kisan Mazdoor Sangathan or Farmers' and Labourers' organisation was founded in 1974 to bring together both landed and landless people of the area so that they could fight against corruption and exploitation and the usurpation of their rights. The association has been particularly successful in getting better treatment from the local sugar cane mill. However, it is hampered by the very fact that its members mostly constitute the poorest and least educated section of the community, who are understandably reluctant to pit themselves against the powerful and corrupt elements of society.

3. Rural Electrification has been one of the government's schemes for some time, but it was only when the project took an active part in the attempts to get electricity in the local villages that any success was achieved. Now Amarpurkashi and Aarikhera not only have electricity but have successfully installed community street lighting, which other electrified villages have failed to do. Street lighting requires co-operation and a shared financial responsibility which not all villages can achieve. The increased use of electricity locally has also led to the building of a new sub-station near Mohammed Ibrahimpur and the markedly increased use of tubewells for field irrigation.

4. Another convenience to farmers

obtained through the help of the project has been the **Sugar Cane Weighing Centre** set up during the cane season in the mango grove of Amarpurkashi. This facility enables farmers to get their cane weighed with the minimum of delay and inconvenience, instead of having to line up for hours at the crowded and poorly equipped mill.

5. The increase in yield of sugar cane locally, which can at least partly be attributed to the facilities provided by the project, has resulted in plans for a **Sulphidation Plant** for sugar cane to be built this year near Shahpur.

Constituent villages of the Amarpurkashi Villages Project include :- Aarikhera

Amarpurkashi, Deori, Hamsapur, Khata, Mohammed Ibrahimpur, Safcelpur, Shahpur, Shaniapur and Vijaipur. The total population covered is a round 7,000.

Some Months ago, we conducted a survey to find out who uses the facilities and services provided by the project most. The results revealed that our project is actively supporting the government's 20-point Programme which especially aims at the poorest and weakest sections of the community. In two of the project activities, the Children's Centre and the Milk Collection Centre, over 60% of the participants own less than $3\frac{1}{2}$ acres of land.



Director :

MUKAT SINGH

M. Sc. (Agra), M. Sc. (London)

59-1. U.P. - 13.
~~56-9~~

Amarpurkashi Agro-Industrial Poly-technic Project

Amarpurkashi Village Development Project

P. O. BILARI, DISTT. MORADABAD.

UTTAR PRADESH, INDIA.

Implementing Agency

THE SOCIETY FOR AGRO-INDUSTRIAL EDUCATION IN INDIA

(Registered under the U. P. Societies Registration Act XXI, 1860)

Supported by

People's Action for Development (India)

Dept. of Agriculture, Ministry of Agriculture and Irrigation, Government of India

Australian From Hunger Campaign (F.A.O.) Sydney, Australia

"Friends of Amarpurkashi" Based in U.K./Society for Agro-Industrial Education in India.

PROGRAMMES IN PROGRESS

Amarpurkashi Agro-Industrial Poly-technic

Krishi Audyogik Junior High School

Balkendra (Children's Centre)

Agro-Hires

Workshop

Farmer's Consultancy Service

Milk Collection Centre

NEWS LETTER

FEBRUARY, 1978

COMMONWEALTH CELL
47/1, (First Floor), Marks Road
BANGALORE - 560 001

In The Beginning ..

Voluntary action starts with the formation of a voluntary organisation. The Amar-purkashi Village Development Project began under a voluntary, registered body, known as "the Society for Agro-Industrial Education in India" founded by Mukat and Jyoti Singh. The following explains its aims and objects. Membership is open to anyone ordinary members are required to pay Rs. 10 (or its equivalent) yearly. There is no joining fee.

NAME

(i) The Organisation shall be called and known as "The Society for Agro Industrial Education in India", herein after referred to as "The Society" with its head office at Amar-purkashi, via Bilari, Distt. Moradabad, U. P. India.

(ii) The Society shall be a non-profitmaking and charitable body.

AIMS

Diffusion of useful knowledge and eradication of poverty, unemployment & ignorance.

OBJECTS

(i) Organise and establish agro-Industrial, academic and other related training and production units in order to provide vocational training and work experience for the students and to support the related educational establishments.

(ii) Provide and arrange grants, incentives, loans and other facilities to students, staff and other persons of the above institutions for training, visits and courses study to be attended at home or abroad.

(iii) Raise funds in cash and in kind to help achieve the above-mentioned aims.

(iv) Undertake and carry out all other such activities as may appear necessary from time to time to achieve the aforesaid aims.

MEMBERSHIP

The membership of the Society is open to all people interested in the promotion of the aims of the Society regardless of their class, creed, race, nationality or sex.

Of course, this is only part of the constitution. Further details are available on request.

APK Staff, 1977-78

Director

Mukat Singh, M. Sc. (Agra), M. Sc.
(Lon.) F. S. S. (U.K.)

Deputy Director

Indel Singh Bhadoria, M.Sc.(Ag. Extn).

Agriculturist

Radhey Shyam Pandey, B.Sc. (Ag.), B. Ed.

Agro-Hires incharge

Ganga Ram, Dip. A.P.K.

Workshop, in charge

Sharafat Ali Mechanic

Tractor Driver/Mechanic

Som pal and Poeran.

Head master (school section)

Raviudra Kumar Singh, M.Sc. B.Ed.

Assistant Masters

Raj Pal Singh, Inter B. T. C.

Rajenda Kumar Sharma, M.A.; I.G.D.
(Bombay).

Mohd. Arkan, B.Sc; M.A. (Pre.).

Kapil Deo Rai, B.Sc;B.Ed;M.A.(Pre).

Atraj Singh, Inter B. T. C.

Office Assistants

Ganpat and Abdul Rehman.

Watchman

Hardwari.

Caretaker

Prem Museeh.

Volunteer Assistant

Johu Meentyre (Australia).

APK On The Move

The following is a report of the APK.

Agro-Hires

A new 35 h. p. Massey Ferguson tractor and also a 12 disc harrow have been added to the Agro-Hire service. Both the new tractor and the old Zetor are working steadily at this time. Their use has earned Agro-Hire as much as Rs. 400 in a day. There is still ample scope for more work to be done by the two tractors.

Workshop

Pooran, with his knowledge of Ferguson tractors, has proved a valuable asset to the workshop since his appointment as mechanic/driver. Pooran along with Shara fatali, are now able to offer a complete repair service for Ferguson tractors and diesel engines.

Poly-technic

Approximately 14 0/0 of the time of Junior High School children up to class 8 is now undertaken within the Poly-technic to give them a basic understanding of farming and farm mechanics, so necessary to their later life. The senior children spend about 50 0/0 of their time within the poly-technic in an effort to better equip them for their rural life ahead. There are two students studying farm mechanics full time, 20 students in the 14-16 age group are under-

taking a Junior Diploma course in rural life and farm mechanics. Further poly-technic courses are mentioned elsewhere in this newsletter.

Krishi Audyogik Junior High School

As from July last year, the school has been merged with the APK Polytechnic, following a recommendation of the national seminar on the problems of village development at Amarpurkashi in May last year. More emphasis is now being placed on farming and farm mechanics, and the new arrangements have been readily accepted by both students and teachers alike. It is still too early to gauge its success, if any. A survey recently undertaken by teachers of both primary and high school is of interest. We have established yearly drop-out percentages in an effort to gauge continuing attendances at both schools. The Junior High School percentages are pleasing, but the primary school percentages after the first year of enrolment are very disturbing to say the least.

Junior High School enrolments July 71. 16.7 % dropped-out the first year, 11.6% the second, 15 % the third, none the fourth and 30 % the fifth year. Enrolments July 72, 2.4 % ; 39 % ; - ; - ; 39 %. Enrolments July 73, 18.6 % ; 7 0/0 ; 2.3 % ; - .

Primary School Enrolments July 66, 80.2 % dropped out after their first year,

10.4% the second, 7.3% the third, 1% the fourth, none the fifth. Enrolments July 67. 88.9 %; 6 %; 3 %; - ;. Enrolment July 68. 90.3 %; 2.1 %; - ; 1 %; 1.1% .

Milk Collection Centre

A truck is now collecting milk from

the centre twice daily and taking it to a near by milk factory. The total milk collected daily is about a quintal. Fitrat Ali is finding his work more constant, but his job is far more secure.

Residential School Planned At Amarpurkashi

A residential school is planned for Amarpurkashi. A number of nearby villages have primary schools but in name only. Pupils are admitted but are not taught, they automatically pass the required examinations. Also, for some of the village students, there is no Junior High School within 20 miles or so. Again even if there are such schools, they are in name only.

Some of the farmers of these villeges make many sacrifices so that their children can receive a good education. In many instances, farmers split their families and rent accomodation in a town which has the necessary schooling for their children. They then have to travel daily to and from their village to continue their farming. Amarpurkashi has long recognised the need and set up the Junior High School which tries to stimulate additional awareness within the student. This progressive approach has proved very successful. Following the the completion of Junior High School, Amarpurkasni has diploma courses available within the Poly-technic at both Junior and senior level. A residential Primary and Junior school is therefore planned, to meet other needs.

Farmers Consultancy Service

This service was first started in November 1971 with the appointment of our first (and famous) agriculturist, Prakash Vir M. Sc. (Agronomy). His appointment was made possible by the generous donation of his salary by the Canadian University Service Organisation for a period of two years. At that time, Miss Patsy Ann Phillips was the Executive Director of CUSO in Delhi and following her visit to Amarpurkashi, foresaw the need for such an appointment.

The service now has the following staff: director, deputy director, agriculturist, teachers and instructors and village leaders.

The salary of the agriculturist is again being paid by CUSO for yet another two years, commencing from July 77 when the present agriculturist Radhey Shyam Pandey was appointed.

The function of the service is for farmers consultancy through formal teaching informal teaching, library and reading room, personal contacts, meetings and coordination with government and non-government agencies working in the field.

Library

Over the years, a very comprehensive range of books, periodicals and newspapers has been received. At present the library has 166 books on agricultural and rural

development, 122 on appropriate science and technology, 48 on education and 10 on general topics. There are about 70 periodicals, we receive four national daily newspapers, one regional and one local daily newspaper 18 weekly publications

The school library also has over 560 books on appropriate subjects, an increasing number of villagers are making use of this service.

Formal teaching

Some 200 students and trainees are in contact every year. They prepare their own small plots for demonstrations.

Informal Teaching

About 60 students were taken on a visit to the Milk Food factory, Dalpat Pur and All India radio station, Ram Pur. They have also taken part in Voluntary Physical Work (Shramdan) Mohd. Ibrahim Pur and Shah Pur. The staff, students and trainees, as well as some of the villagers, all take part in organising such of events as fairs, exhibitions, farmers-days and other cultural celebrations.

Personal Contacts

People come and ask advice on personal matters, relating to all aspects of their lives.

Meetings

In villages of the project area are held

whenever there is need for collective discussion. During October and November last year, such meetings were held in Khata, ShamasPur, Aarikhera, Mohd. Ibrahim Pur, Shahpur, Safeel Pur, Deori, Vijai Pur and Hamza Pur. At Amarpurkashi, there is discussion every evening at the project office. Their attendances vary from 10 to 100.

Co-ordination

There are a number of official and non official bodies working within the rural areas. Amicable relations have been esta-

blished with all so that knowledge and facilities can be used to our best advantage.

Some of these people are, representatives of IFFCO and Pant Nager Agricultural University; staff of Community Development Block, Baniakhera; local staff of the Soil Conservation Dept; Cane Co-op. Society, Bilari; and the Ajudhia Sugar Mill, Raja Ka Sahaspur.

Determined Villager Catches Thieves

Lahan Singh of Amarpurkashi, recently found that the only way of his getting Justice done was to do the job himself, even though it proved costly.

About the middle of December, his two mail buffaloes were stolen. He approached the Bilari police but was told to look himself first, if he didn't have any success, then he could file a formal report.

He looked for eight days at the many cattle marks eventually finding one of his buffaloes. He found that had been sold to three different people in those eight days. He approached the Bilari police, and after paying Rs. 5, he was legally entitled to the return of his buffalo. His other buffalo was still missing. On checking the ownership of the first buffalo of the last eight days, he found that the name of the witness of the first sale was a genuine one. By persurtion and determined interrogation, Lakan soon established the names of the other two men. The police had still done nothing. The three men Khushali, Ram Kumar & Tula had sold the buffalo for just Rs. 270, each receiving Rs. 90.

On approaching the police with his find, Lakan then had to pay for the police to go and arrest the thieves. The three readily admitted their theft and told where the second buffalo was. Again Lakan had to pay police transport costs.

It had taken 25 days and approximately Rs. 500 for him to reclaim what was rightly his. The approximate market price of two buffaloes is Rs. 800.

Report of the Australian Visit

Jyoti and I visited Australia at the invitation of the Australian Freedom from Hunger Campaign, who have helped fund projects here at Amarpurkashi for the past three years.

They invited us to lend support to the opening of their yearly fund raising campaign. The Australian Freedom From Hunger Campaign supports many projects such as ours, Jyoti and I were very honored to have been singled out by them and be asked to visit Australia to assist publicising their important work of fund raising, and for us to have the chance of telling people first hand about Amarpurkashi.

Our visit was just over two and a half months duration, in which time we travelled over 16,000 kilometres by air, about 5,500 by road and spoke to about 11,500 interested people. We also had countless television, radio and press interviews during our most enjoyable visit.

We arrived in Australia at the end of July, it was still their winter. We had no idea at this stage what lay ahead or of the interest our visit would hold. We had received some prior briefing from the FFHC committee on what they expected from us, we thought it best if we spoke from our hearts, and because we did, we are sure that this is why we were endeared to so many people. It was a joyful return to Australia for Jayoti after an 11 year absence. She had told me

much of her former country, but now I had the opportunity to see it.

My first impression were the people, their healthy outlook. In the main, they lead very affluent lives, they live in nice modern houses with all the necessary conveniences, they drive motor cars, eat plenty of wholesome food, earn good wages. Their children have every opportunity to learn from excellent schools and universities.

But Jyoti, after her time here in India remarked: "I don't see people, only cars." Further, she told me of the Australian custom that is usual if wanting to visit friends—you tell them beforehand that you are coming so that they can prepare for your visit. How very different it is to here in India.

I did find that some of the Australian people whom I came in contact with, appeared only to have time for themselves, but then there were many (and I mean many) who became very interested in our work here, always asking questions which we were only too happy to answer.

Two such people were a Dutch couple, Ans and Toins now settled in Australia.

I found the response of the university students I spoke to very poor, but the exact opposite must be said of the many secondary (high) schools and also service clubs that I had the honor to address. Good discussion

always took place also at the FFHC committee meetings that I addressed.

People (or rather visitors such as ourselves) are generally critical of the media people. But we found their coverage of our visit very good. Their interest did surprise us. Every state we visited the television, radio and newspaper people were normally there to greet us. We found both the Queensland and Tasmania media the most responsive.

On arrival at Sydney airport, we were met by the Australian Freedom From Hunger Campaign National Director, Barry O'Hagan. We decided to stay in Sydney that night before journeying on to Adelaide, Jyoti's home town.

Our first night in Australia was spent in a very modern hotel. It had all the luxuries one could ever want, color television, refrigerator, radio, central heating, air conditioning, telephone, own bathroom.

The following day, we flew to Adelaide (South Australia) for week's holiday with Jyoti's family. She was very pleased to see them after an absence of 11 years.

On Sunday, August 7, we left Adelaide by air for a five day visit to Perth, Western Australia. This was our first assignment, we both did not know what to expect. On the plane, a stewardess approached us and said how she had seen Jyoti's film "India and Jan Myers". She said she was honored to have us on her flight. These encouraging words were very gratifying and made us feel very confident to the task ahead.

Western Australia was the first of the

Australian states we were to visit. We stayed at another very modern hotel, at the airport we were interviewed by both television and the press.

Our time in Perth was spent giving talks to various organisations and schools, and meeting lots of nice people.

We then moved on to the state of Victoria, where we stayed at the Victoria Hotel Melbourne. Our first visit to this state was to last 11 days. We were kept busy giving talks, meeting people. We spoke to as many as four organisations in one day.

One of the many happy moments of this particular visit was our visit to Mater Christi Girls College in the Melbourne suburb of Belgrave. The girls were unaware of our visit, only that morning they had been shown Jyoti's film, they were indeed surprised when we arrived "in the flesh." We had a most enjoyable time there, their questions were many, they appealed for more information of our work at Amarpurkashi.

It was here, at this school, that we first met Ans (mentioned previously). She had come to the school to enrol her child. Our appearance interested her, she introduced herself, and asked us if we could spare the time to talk to her community group the following day. Her interest was such that we could not refuse despite our busy schedule. And what an enjoyable day we had. Their intense interest was indeed very gratifying to both Jyoti and myself. We only wished we could have spared them more time.

From Melbourne we flew to Hobart,

Tasmania, which is an island state at the bottom of the main Australian continent. The visit was of five days. We stayed with Mr. and Mrs. Mac Hazelwood who visited us here at Amarpurkashi earlier this year. The Tasmanian people were very attentive to our talks.

The next state we visited was Australia's smallest, but most important, the Australian Capital Territory, in which the capital of Australia Canberra is situated. While there, we were given a dinner by the slate FFHC in a restaurant called the Taj Mahal, we also met Dr. Kestevens of the Australian Department of Primary Industry and chairman of the National Projects committee, FFHC. We had television, radio and press interviews. It was very encouraging to us to see how much importance people were making of our visit.

We then flew to Sydney, New South Wales. On arrival we were driven to Newcastle, a big town about 100 miles from Sydney. We were thrilled to attend a civic reception in our honor given by their mayor Alderman Anderson and his wife, Mrs. Anderson. Also present were many prominent citizens. The reception was of course covered by the mass media. Following, we had dinner with Dr. and Mrs. Goel, president of the local Indian association, at which there were many prominent members also present. After dinner, we gave an address to the many local supporters of FFHC. The following morning, Jyoti was interviewed by the local radio station.

We were then driven back to Sydney. That weekend we had free, it enabled us to

have a well-earned rest and prepare us for the busy times that still lay ahead.

In Sydney, we gave talks to important organisations and service clubs, and visited the Hawkesbury Agricultural College, which is one of New South Wales most important agricultural Colleges. We also attended a private screening of Jyoti's film, "India and Jan Myers", filmed here at Amarpurkashi two years ago.

The next state we visited was Queensland. We first visited their famous "Gold Coast," a popular tourist beach resort. Here we gave talks to various organisations and met many people before travelling on to Brisbane (the capital) by bus. Our visit to Queensland was to last seven hectic but very enjoyable and informative days. We were kept busy with talks, television, radio and press interviews. After three days, we flew to Central and Northern Queensland, what a day! We left Brisbane at about 8.30 a.m. and our first stop was Rockhampton, a distance of 500 miles. There we were interviewed by television Stations, plus gave a talk to interested students. We then flew onto Townsville, a distance of about 450 miles where we were interviewed by two radio stations, their local paper, and addressed a meeting of FFHC area Collectors...

The flight from Rockhampton to Townsville was one we both will never forget. Our plane from Rockhampton set down at Mackay, a town about midway between Rockhampton and Townsville. After some time there, I enquired what time the plane was to continue its journey to Townsville. The man garbled something (which I didn't understand) and then asked us to step on to

the luggage scales and be weighed. But on leaving the air terminal building to board the plane to Townsville, I soon understood why! Our plane was a tiny Cessna aircraft which only had seven seats. Believe me, our hearts were in our mouths for the whole journey, the flight was very rough.

We flew back to Brisbane (non-stop) the next day to give further talks there and to meet more people sympathetic to our cause.

The following day, we returned to Sydney (New South Wales) where we had television, radio and press interviews, gave an address at the launching of "Hunger Week" in their famous Hyde Park, attended an Indian Community meeting, and again made contact with lots of people.

On leaving Sydney, we made a short return visit to Canberra (Australian Capital Territory). Here we had important discussions with the staff of the Australian Development Overseas department and also spoke at two of their prominent colleges.

We then returned to Melbourne (Victoria) where we attended a presentation ceremony where FFHC was handed a cheque of SA22,500 by the premier of Victoria, Mr. Hamer.

That night, I flew to Tasmania for a return visit, Jyoti and Shobhana flew to Adelaide to stay with her parents. As well as the many television, radio and press interviews I attended, I also visited some of Tasmania's rural towns where I gave many talks and again met lots of interested people.

I also addressed meetings within their capital of Hobart.

While there, I visited children at one of the local schools who were conducting a "starve-a-long" that day. The children donated the moneys they would have spent on their lunch to help causes such as ours. I was told that most schools throughout Australia have similar such days.

My next and last state to visit was South Australia, Jyoti's home state. Her parents, Jyoti and the children joyfully welcomed me on my arrival at Adelaide airport. The following day was free, it gave me a chance to see some of Jyoti's home town.

Back to work! There were many talks to give, again the television, radio and press interviews. I addressed students of their big Roseworthy Agricultural College, also the Urrbrae Agricultural High School. Both these institutions prepare young people for a rural career.

One day when walking along an Adelaide street, a man rushed past, stopped, then turned and said: "I know you, I saw a film about you on television." It was this sort of impromptu recognition that helped make being in Australia that much more enjoyable. By recognising us, wherever we went people were automatically associating themselves to our cause.

Jyoti and I also attended an enjoyable luncheon with local members of the India Australian Association. I continued to meet many people and many of Jyoti's friends. My stay in Australia had come to an end. It had been very enjoyable, but a little

exhausting at times.

Our stay was not without incident. When in Canberra the second time, I registered our concern with the India High Commission there, following the troubles they were experiencing by Australian (Anand Margis.) The commission suffered damage and some personnel were hurt in the various scuffles.

On reaching Melbourne, we were politely requested to stay within our room until such time as officials from FFHC would come and explain this unusual attitude. They arrived and showed a letter they had received threatening our lives. The crudely composed message said (from memory) "Gruff williams is not alone, another Singh from FFHC will suffer the same fate." (William was one of the men arrested in troubles at the Indian High Commission in

Canberra).

The police regarded this threat as most serious, and for the remainder of our stay, they accompanied us everywhere safeguarding us. Luckily, no physical attempt was made to either Jyoti, the children, or my self.

I tearfully left Adelaide on Monday, October 17. My visit to Australia had lasted just over two and a half months.

In conclusion, there are many, many people who helped make our stay in Australia a very enjoyable and enriching one. It would be unfair to single out individuals, but I must pay special thanks to the Australian Freedom From Hunger Campaign who made it all possible, it was an experience we will both never forget.

Programme of Visit to Australia

July 31, Sunday:-

Arrive Sydney.

Met by Barry O'Hagan, National Director, and Bill Hobin, Chairman.

Stayed night Travelodge Hotel.

August 1, Monday:-

Left for Adelaide for a week's holiday with Jyoti's sister, Cynthia.

August 7-12, western Australian VISIT

August 7, Sunday:-

Arrive Perth.

Met by John Massan, interviewed at airport by ABC television and newspaper "Western Australian."

Stay in Perth at Park Towers hotel.

August 8, Monday:-

Gave speech at Cloister Sq. for "Development week."

Spoke Norbet College, Perth.

Dinner with Mr. and Mrs. John Massan.

August 9, Tuesday:-

Dinner with Dr. Mills, chairman state FFHC.

August 10, Wednesday:-

Interviewed by "Daily News"

August 11, Thursday:-

Spoke St. Mary's C. of E. Girls college, Karrinyup, Perth.

Senior students Carine High School, Perth.

August 12, Friday:-

Leave Perth for Melbourne, Victoria.

August 12-13, Victorian Visit

August 12, Friday:-

Arrive Melbourne.

Met by Miss B. Samford, vice-chairman state FFHC.

Stay in Melbourne at Victoria Hotel.

August 13, Saturday:-

Spoke annual general meeting, Retired Nurses Assoc., Ron Butt, director state FFHC accompanied.

Dinner with Mr. and Mrs. Geoff Phillips.

August 14, Sunday:-

Enjoyed hospitality of Mr. and Mrs. Geoff Phillips.

August 15, Monday:-

Spoke Marter Christie College, Belgrave
Ron Butt escorted.

History Teachers association workshop
Doug Coombs accompanied.

Quota Club, Essendon, Miss Samford escorted.

August 16, Tuesday:-

Spoke Noble Park High School, Geoff Phillips accompanied.

Stella Maris Convent, Frankston.

Marionist College, Frankston.

Guest speaker at Glenroy Rotary Club dinner, Ron Butt introduced.

August 17, Wednesday:-

Spoke Kalista Community Centre, Dandenong Hills.

Guest speaker at Glenroy Rotary Club dinner, Doug Coombs introduced.

August 18, Thursday:-

Spoke Mentone Girls High School, Geoff Phillips accompanied.

Guest speaker at state FFHC luncheon, Bayswater Lions Club dinner, Ron Butt introduced.

August 19, Friday :-

Spoke Kew High School, Ron Butt accompanied.

Guest speaker at South Melbourne Rotary Club luncheon, Geoff Phillips introduced.

Dinner with Mr. and Mrs. Doug Coombs.

August 21, Sunday:-

Lunch with Mr. and Mrs. Keith Ryall

(an Apexian)

Visit to the nearby hills, and to Neil Douglas, an artist and experimentalist in an alternative life style.

Dinner with Mr. and Mrs. Ron Butt.

August 22, Monday:-

Visit to a dairy farm, about 150 km Melbourne, Ron Butt accompanied.

Visit to central office of Community Aid Abroad, also office of Australian Volunteers Overseas.

August 23, Tuesday:-

Leave Melbourne for Hobart, Tasmania.

August 23-28 Tasmania Visit.

August 23, Tuesday :-

Arrive Hobart.

Met by John Kennedy, chairman state branch FFHC.

Lunch with Mr. and Mrs. Kennedy.

Visit to town and nearby scenic views.

Dinner with Mr. and Mrs. Mac Hazelwood.

Stay in Hobart with Mr. and Mrs. Hazelwood.

August 24, Wednesday:-

Visit state office, FFHC, Mac Hazelwood in attendance.

Interviewed by Radio 7H (live broadcast).

Spoke local branch, FFHC.

Interviewed by TVT television.

August 25, Thursday:-

Travel to Launceston, Mac Hazelwood accompanied.

Address district committee, FFHC.

Stay night with Dr. and Mrs. Russel Bushley.

August 26, Friday:-

Interviewed by newspapers the "Examiner", Launceston and the "Advocate" Devonport.

August 27, Sunday:-

Interviewed by ABC radio and also ABC television.

August 28, Sunday:-

Leave Hobart for Canberra, Australian Capital Territory.

August 28-31, Australian Capital Territory Visit

August 28, Sunday:-

Arrive Canberra.

Met by Bob Wann, chairman state branch, FFHC.

Dinner with Mr. and Mrs. Bob Wann.

August 29, Monday:-

Interviewed by Radio 2XX.

Dinner FFHC at "Taj Mahal."

August 30, Tuesday:-

Meeting with Dr. Kestevens of Dept. of Primary Industry and also chairman National Projects committee, FFHC.

Interviewed by newspaper "Canberra Times."

Interviewed by TVT television.

August 31, Wednesday:-

Leave Canberra for Sydney, New South Wales.

August 31-September 10, New South Wales Visit

August 31, Wednesday:-

Arrive Sydney.

Met by Jack Green and Mrs. June Pink.

Driven from airport to Newcastle by Mrs. Pink, regional director, FFHC. Lunch with Mrs. Pink and family.

Guests at reception at city hall given by Mayor Anderson and his wife Mrs. Anderson and other prominent citizens, (covered by television and press).

Dinner with Dr. and Mrs. Goel, president local India club. Prominent members of Indian community also present.

Address local supporters Newcastle FFHC. many Indians present.

Interviewed by Radio 2NX.

Stayed night Belmont Hotel.

September 1 Thursday:-
Jyoti interviewed by Radio 2 NX (live broadcast).

Driven to Sydney by Mr. and Mrs. Pink.
Arrive Sydney.

Introduction and informal get together with Robin Mackay, director state branch, FFHC, also office staff.

Stay in Sydney at Travelodge Hotel.

September 2, Friday:-

Meeting with regional directors, state FFHC.

Reception. In attendance FFHC supporters and members of International Aid agencies.

September 3 and 4, Sat. and Sunday:-

Free.

September 5, Monday:-

Interviewed by ABC radio for rural programme. Also had discussions with Alan Eager of their national news programme.

Viewed Jyoti's film. "India and Jan Myers." Guest speaker at Crowsnest Rotary Club dinner, Robin Mackay introduced.

September 6, Tuesday:-

Discussion with Irene Davies, liaison officer, FFHC projects committee.

Guest speaker at Sydney Rotary Club luncheon.

Guest speaker at Hurstville Lions Club dinner. Mr. and Mrs.

Stafford introduced.

September 7, Wednesday:-

Visit whole day at Hawkesbury Agricultural College, Richmond.

September 8, Thursday:-

Spoke CAA group, Sydney University, Prof.

John Birch, state chairman, CAA & Guest speaker at Sydney Lioness Club dinner Robin Mackay introduced.

September 9, Friday:-

Free. Scenic visit to zoo and shopping.

September 10, Saturday:-

Leave Sydney for Coolangatta, Queensland.

September 10-17, Queensland Visit

September 10, Saturday:-

Arrive Coolangatta.

Met by Norman Martin, state director, FFHC, and Russ Walkington.

Interviewed by Radio 4GG (by Russ Walkington).

Lunch with Russ and Norman.

Interviewed by newspaper "Gold Coast Times."

Stayed night Appollo Motor Inn.

September 11, Sunday :-

Address Uniting Church, Mermaid Beach, Uniting Church, Surfers Paradise, Presbyterian Church, Palm Beach.

Leave for Brisbane (by bus). Norman Martin accompanying.

Stay in Brisbane at Canberra Hotel.

September 12, Monday :-

Press conference, two television and two radio stations present, also two newspapers.

Spoke Marist College, Rosalie, Neil Roberts and Norman Martin accompanied.

Reception. by FFHC members.

September 13, Tuesday :-

Spoke Brisbane Grammar School, and state Director escorted.

James College, Brisbane.
Dinner with Mr. and Mrs. Neil Roberts,
chairman state branch, FFHC.

September 14, Wednesday :—

Spoke St. Laurence College, Neil and Martin
escorted.

Lunch and speech St. Aidan's College.
Spoke BBC College.

September 15, Thursday :—

Leave Brisbane for central and northern
Queensland (by air).

Arrive Rockhampton, 9.25 a.m.

Met by Mr. and Mrs. Richard Watterson
and Doug Kuddy.

Interviewed by both ABC and Channel 9
television stations.

Address students Capricornia Institute of
Advanced Education.

Leave Rockhampton for Townsville (by air)
12.30 p.m., arrive 3.45 p.m.

Met by Bishop Faulkner.

Interviewed by radio station 4TO and 4AY
also newspaper "Townsville Daily Bulletin".

Addressed meeting area collectors, FFHC.
Stayed night Travelodge Hotel.

September 16, Friday :—

Leave Townsville for Brisbane.

Met by Norman Martin.

Spoke Padua Boys College, Mt. Alvernia
Girls College, Cavendish State High School,
Neil Soberts, Norman Martin, and education
director J.A. Golding present.

September 17, Saturday :—

Leave Brisbane for return visit to Sydney.

*September 17-20, Return Visit, New
South Wales.*

September 17, Saturday :—

Met By Robin Mackay, State Director.
Interviewed by newspapers "Sun Herald"
and "Telegraph"

September 18, Sunday :—

Telephone interview by Radio 4.
Attended Indian Community meeting at
Richmond.
Interviewed by Radio 2CH (live broadcast).

September 19, Monday :—

Spoke St. Sacallasca High School, Mrs.
Monica O'Hagan & Robin Mackay present.
Interviewed by ABC television.
Public address at the launching of 'Hunger
Week' in Hyde Park.

Dinner with Barry O'Hagan, national direc-
tor, FFHC.

September 20, Tuesday :—

Leave Sydney for return visit to Canberra.

*September 20-21, Return Visit,
Australian Capital Territory.*

September 20, Tuesday :—

Arrive Canberra.
Met by Joana Forbas.
Discussion with staff of Australian Develop-
ment Overseas (Neville Ross and others).
Spoke Hawker & and Phillips Colleges.
Tea discussion with Sir Otto and Lady
Frankel.

Stayed night Embassy Hotel.

September 21, Wednesday:-

Leave Canberra for return visit to Melbourne.

September 21-23, Return Visit, Victoria.

September 21, Wednesday :-

Arrive Melbourne.

Met by Royce Peppin, state chairman, FFHC
Stay at Victoria Hotel within security arrangement because of threat to life.

September 22, Thursday :-

Attended press conference, two radio station three newspapers.

Royce Peppin and Ron Butt Present.

September 23, Friday :-

Attended presentation ceremony of cheque SA22, 500 by Premier Hamer to FFHC.

Interviewed by Radio 3AW.

Tea with Bruce and Joan Grant (former Aust. High Commissioner to India) and their family, also Dr. George, Royce Peppin and Ron Butt (with security detectives in attendance also).

Leave Melbourne that night, Jyoti and children to Adelaide and Mukat for return visit to Hobart.

September 23-October 1, Return Visit, Tasmania

September 23, Friday :-

Arrive Hobart.

Met by Doreen ad Mac Hazelwood and also security police.

Stay in Hobart with John Kennedy.

September 24, Saturday :-

Visit to places of interest with John Kennedy.

Dinner with Jone and Ikram Naqvi, Hazeldwoods accompanied.

September 25 Sunday :-

Dinner with John Kennedy. Dt. Sgt. Hamersly of security police in attendance-

September 26, Monday :-

Luncheon, Kashmir restaurant, with Neil Batt, state Minister of Education and ex. chairman of Aust. FFHC. and 11 other prominent FFHC supporters.

September 27, Tuesday :-

Interviewed by Radio 7HO (live broadcast).
Visit to centre of United Unemployed (Paul Chambers interviewed for their magazine).

Meeting with a priest organising a starve-along fast at Glenorchy Uniting Church.

Interviewed on ABC radio by young boy, Andrew (arranged by Mr. Fyffe).

September 28, Wednesday

Spoke Brighton Primary School.

September 29, Thursday :-

Leave Hobart for Launceston (by car) with Mac.

Interviewed by ABC radio 7LA, Radio 7EX, also television station Channel 9.

Cuest speaker South Launceston and King Meadows Rotary Clubs dinner, also addressed UNAA Launceston. Mac accompanied everywhere.

Stayed night with Romi and John,

September 30, Friday:-

Leave Launceston for hobart.

Spoke secondary school, Hobart.

Lunch with Mr. & Mrs. Kenedy.

Spoke Baghdad Primary School.

Dinner with Nikhet and Islam Hasain.

October 1, Saturday:-

Leave Hobart for Adelaide, South Australia.

October 1-16, South Australian Visit.

October 1, Saturday:-

Arrival Adelaide.

Met by Jyoti, Tarini and Shobana, and Jyoti's parents, Mr. and Mr. Myers (and three detectives of security police).

October 2, Sunday:-

Free, car ride with family.

October 3, Monday:-

Addressed morning assembly, Unley High School, Mike Hadgson introduced.

Met with state FFHC office staff.

Press conference, A B C radio and newspaper the " Advertiser " present. Ken Nicholas, state director, and other FFHC staff accompanied.

Interviewed by television station Channel 10.

Met Pat Arnett, Jyoti's friend.

October 4, Tuesday:-

Spoke Salesian College, Ray Buttery accompanied.

October 5, Wednesday:-

Spoke and visited students Roseworthy Agricultural College, Roseworthy, whole day.

Trevor Seargent accompanied.

October 6, Thursday:-

Spoke Annesley College (Jyoti's old college) Ray Buttery escorted.

Interviewed by both Radoi SKA and newspaper "Sunday Mail", Ken Nicholas present Spoke students Adelaide University, Ray Buttery accompanied.

Lunch with professors in staff canteen.

October 7, Friday :-

Spoke Pembroke College, and Marion High School, Mike Hodgson accompanied.

October 8, Saturday :-

Lunch With Dr. Muthiah, chairman, India Australia society, at the Modbury residence of Mr. and Mrs. Jadhav.

October 9, Sunday :-

Address Pilgrim Church (minister, Rev. Dorothy Walker). Ken Nicholas escorted. Attended rock festival, Festival Centre plaza.

October 10, Monday:-

Holiday, picnic with family at beach.

October 11, Tuesday:-

Spoke Mount Barker High School, Mike Hodgson escorted.

October 12, wednesday:-

Spoke Mitchell Park High School, Trevor Seargent escorted.

Spoke St. Aloysious College, Ray Buttery accompanied.

October 13, Thursday:-

Spoke Immanuel College, Trevor Seargent accompanied.

Spoke St. Mary's College, Ray Buttery escorted.

October 14, Friday :-

Addressed seminar of Australian Church

Women.

Spoke students Urrbrae Agricultural High School, Mike Hodgson escorted.

October 15, Saturday :-

Free.

October 16, Sunday :-

Addressed, service, Prince Alfred College.

October 17, Monday :

Leave Adelaide for Delhi.

October 18, Tuesday :-

Arrive Delhi.

Proposals Implemented

Following the National Seminar on the Problems of Rural Development at Amarpurkashi last year, a number of proposals were passed, some of which have now been implemented

Dr. B. PRAKASH of V. S. K. Atarra (Banda) has launched a fourpage bulletin under the name " Gram-Gatha ".

B. G. PITRE of the Doon School Dehradun organised a succesful visit of two students to APK. Their visit lasted over a week.

THE AMARPURKASHI AGRO POLY-TECHNIC has established important contact with the Hindu Post Graduate College of Moradabad, through lecturer Vineet K. Gupta.

B. G. PITRE has arranged for a number of studies, which are being taken-up by Dr. B. Prakash, Mukat Singh and himself.

Important Organisation Reformed

Following a lapse of three years, the Gramin Kisan Masdoor Sangathan has been re-formed, following a recent conference at Amerpurkashi.

Over 500 villagers attended, with the meeting lasting over five hours. A number of constructive proposals were passed and an adhoc committee was formed to deal with these immediate proposals. Officers elected were : Chairman, Ch. Balwant Singh Advocate; vice-chairmen, Ganga Singh, Mahendra Singh and Dr. Chandra Pal Singh Raghav Editor; General Secretary, Mukat Singh; secretaries, Ganga Ram, Zakir Husain, Rajvir Singh, Gulfan Singh, Hari Ram. Also there are 60 committee members.

Some three years ago, this organisation of local farmers and farm laborers had risen to district level, but during the emergency it was disbanded for the obvious reasons.

It had been responsible for solving a number of problems in this area.

It was the people of the APK who first founded this organisation. It was their initiative to re-form it.

More than 30 proposals were passed at the conference. Those provoking most discussion were;

- (a) Irresponsible behaviour of Government officials towards rural folk.
- (b) Ignoring the cost of cultivation when fixing prices of agricultural produce.
- (c) Absence of rural criticism and comments on Government's new policies and reforms regarding rural life.
- (d) The existing and future problems of sugar cane development.

It is hoped that the Government will take a serious look at the proposals suggested at this meeting.

Corrupt Police Caught By Villagers

Two constables of the Bilari police station were caught receiving, unlawfully, Rs. 150 from a poor villager of Safeel Pur, one of the villages within the Amerpurkashi project area.

The constables had received bribes from

villagers in the past year.

The villagers planned their arrest by having two C. I. D. inspectors on hand when the alleged bribe took place. Their capture has raised morale in the village tremendously.

Training Courses Planned

It is planned to commence shortly a number of appropriate agricultural courses at the Amarpurkashi Poly-technic. As interested students are enrolled, they will be consulted so a workable syllabus best suited to their needs can be established.

The courses will come under three main headings, General, Technical and Socio-economic. More than half the time will be devoted to practical experience.

One of the most important policies of the poly-technic is that education in its widest sense is vaxix to every development process and therefore includes formal, informal and non-formal learning all of which are essential to the development of the area.

The Amarpurkashi Poly-technic is recognised as being unconventional, flexible, explorative and most importantly, progressive.

There are no pre-education requisites to attend these courses, their length will vary from a week to two years with release periods for ample practical experience and for continuing learning. Courses are supported by a strong follow-up.

Milk Co-op Secretaryship:-

This course is planned for the secretaries of village milk co-ops, in consultation with the Department of Dairy Development and the Infant Milk Food Factory, Dalpat Pur, Moradabad.

Farming and Farm Mechanies:-

Junior and senior diploma level courses are already in progress. The next will start as soon as sufficient interest is shown. The course is for the sons of farmers with experience or knowledge of agriculture. Other interested persons may apply.

Development/Project Worker/Change Agent:-

This course has been very successful in the past and is aimed at those enthusiastic and willing young who have the desire to bring a healthy change in the rural areas and to liberate them from want, hunger and oppression. The successful trainees are helped to run their own independent projects, also jobs which fall vacant within APK project ere with trainees of this course.

Other courses being planned at junior diploma level are:—

**Dairying*

*Appropriate education for (a) Balkendra, (b) Private Residential Children School, (c) Junior High School, (d) Agro-Industrial Poly-technic.

**Village Leadership*

*Farming- (a) Vegetable, (b) Cash, (c) Mixed, (d) Organic.

For further information of any of these courses please contact the Director, as soon as possible.

Write: Director, Amarpurkashi Agro-Industrial Poly-technic, P. O. Bilari, Distt. Moradabad, U. P. India.

Jyoti and Children in Australia

Following our Australian visit, Jyoti and the children, Shobanna and Tarini, have remained there and are staying with Jyoti's parents in Adelaide, South Australia.

After an 11 year absence from her family, Jyoti wanted to spend Christmas with them; also, when in Australia it was found that Jyoti was four months pregnant, even though she was sterilised following the birth of our last child.

Australian doctors strongly advised that she stays in Australia for the birth, their methods and help are much more extensive. It will probably be as late as May before they all return to Amarpurkashi. Jyoti's address is 24 Keyton Street, Lockleys, South Australia.

You are all probably aware by now that it was she who promptly answered your letters, not I. I miss her and the children very much.

Mohd. Islam's Haj Pilgrimage

Mohd. Islam of village Mond. Ibrahimpur (one of the Amarpurkashi group) recently returned from an enriching pilgrimage to Holy Mecca and Medina, Saudi Arabia. He was away just over three months, it cost him in excess Rs.8,000 for his journey. It is no wonder that not every Indian Muslim can afford to fulfill his cherished ambition.

Mohd. Islam explains the holy ceremony of the Haj: "Two continuous prayers 'zohar' and 'Asar' in the plane of Arfat, two prayers 'Magharib' and 'Isha' in Muzdalfa, Hitting three Satans in turn with stones, each seven times and in all 49 times, performing a

sacrifice of a goat (price 200 Rail-equivalent Rs. 500 and having one's head shaved in Mina, near Mecca."

Mohd. Islam also told of the practices of the poorer pilgrims to help pay for their trip. Certain Indian items are very popular in Saudi Arabia and locals pay up to twice their Indian value. Also, certain items from Saudi Arabia are popular in this country and on their return, the Indian pilgrims sell these items to help supplement the expense of their journey.

Mohd. Islam had saved for a long time to make his pilgrimage.

Indication of Progress, Amarpurkashi Village 1970-77

The following chart shows the encouraging progress within the Amarpurkashi village in the past seven years. It is planned to conduct similar surveys in all villages within the project area.

S. No.	Item	1970	1977	Change
1.	Population	598	700	17.0%
2.	Bricked Houses	5	45	Plus 40
3.	Electric light Connction	—	9	Plus 9
4.	Bricked lanes	658'/2735'	1049'/2735'	Plus 751'/2735'
5.	Link road bricked	250'/741'	741'/741'	Plus 491'/741'
6.	Irrigation facilities			
1.	Petsian wheels	5	9	Plus 5
2.	Borings	5	22	Plus 17
3.	Diesel Engines	4	11	Plus 7
4.	Tubewell			
a.	Govt.	1	1	—
b.	Private	—	4	Plus 4
7.	Hand pumps for drinking water.	5	61	Plus 56
8.	Education			
a.	Graduats	3	3	—
b.	Matri culates	5	13	Plus 8
c.	Junior High School passed	19	40	Plus 21
9.	Salaried job			
1.	Full time	26	26	—
2.	Past time	2	2	—
10.	Bicycles	17	60	Plus 43
11.	Transistor, radios	—	29	Plus 29
12.	a. Clocks	3	7	Plus 4
b.	Watches	6	57	Plus 51
13.	Sewing machines	3	12	Plus 9
14.	Dunlop carts	4	13	Plus 9
15.	Chaff Cutters.			
1.	Power	—	1	Plus 1
2.	Hand operated	5	71	Plus 66
16.	Money lending.			
2.	Out siders.	4	1	— 3
2.	Local,	10	9	— 1
17.	Gamblers.	60	—	— 60
18.	Country lequor makers	20	1	— 19
19.	Thieves	15	—	— 15
20.	Out siders living in the village	5	17	Plus 12
21.	Agricultural Yield.			
1.	Wheat	4.14 quintals/acre	9.66 q/acre	Plus 5.52 q/acre
2.	Rate	5.52	11.04	Plus 5.52

Visitors

- Aug. 6, Ashok Kumar, Editor, Sanyukt Awas weekly, Moradabad.
24. Arvind Gupta, c/o Education Office, Beawar, 305901.
- Sep. 15, M. Lall, asst. manager (P), Hindustan Lever Ltd; also D. S. Chaturvedi, Hindustan Lever Ltd.
- 27, I. D. Gautam, Principal, Industrial Training Institute, Chandausi.
- Oct. 7, Dr. T. R. Rathore, asst. professor, Pant nagar, also Dr. O. P. Singh Soils Lab. Ram Pur.
- Nov. 9-21, Maj. Sedley Sweeny, Brynoyre, Talybond-on-Usk, Brecon, Powis, Wales, U. K.
.....villagers awakening to new hope of self-reliance and awareness...
- 19-24, Sonam Tsensing, H. O, Company, 2 Vikas, c/o 56 A. P. O. "highly impressed".
- Dec. 2-3, G. N. Gupta, Ag. Engineer (Pant Nagar), C-76, Gandhi Nagar, Moradabad.
- 4-11, Vidhu Bhai Randev and Himanshu Bhatt, students Doon School Dehradun.
- 22-24, Suresh Chand Pandey and Sunceta Pandey, Government Industrial Training Centre, Pines, Nainital.
- 23-24, Prof A. N. Ram, B. I. T. Messra, Ranchi.
".....the project is for villages, the villagers are becoming more and more aware....."
- January, 1978
Arjun Dass, Delhi
John Mc. Intyre, Adelaide, Australia.

Acknowledgement

Maj. Sedley Sweeny (Wales)

For his help in getting his friend Mac Anderson, a building contractor of Wales, to agree, subject to the receipt of plans and final estimates, to fund the building of the school, plus equip the APK workshop of necessary tools approx. total £950.

Dr. and MRS. Shiv Sharma (Australia)

A cash donation of \$100, given when at Newcastle during Australian visit.

Concerned Indians (Seattle, U.S.A.)

This offer of support came through Rajinder S. Manhas, on behalf of a number of Indians in Seattle. They have offered approx. Rs. 1200 a month for a period of about a year.

Morris Stephenson (Australia)

A retired Optometrist who plans to travel to India soon, bringing with him a quantity of discarded spectacles and eye testing equipment, in the hope that he would donate spectacles to these people who are in need of such items.

Australia Freedom From Hunger Campaign

On their behalf, the Peoples Action for Development (India), Dept. of Agriculture and Irrigation, Govt. of India, released a sum of Rs. 27,000 as the second installment of the final year's grant of Rs. 113,457. The first installment of Rs. 60,000 was acknowledged in the previous newsletter.

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Australian Freedom From Hunger Campaign.

Irene Davies of FFHC, Sydney, advised late last year that the Australian Freedom From Hunger Campaign have sanctioned a supplementary grant of Rs. 87,107 on account of inflation. This has now been gratefully received by the project bankers.

Friends Of APK|Society For Agro-Industrial Education In India (U.K.)

Erica Linton, general secretary of the Friends of APK, recently informed that a

donation of £200 would soon be sent to help meet the expense of bricking some of the APK lanes.

Quota Club Of Essenden (Australia)

A donation of £63.09 has been received from the secretary of that club, following Mukat and Jyoti's talk to their members during their visit.

Other Donations

A very good friend of Mac Hazelwoods when in Launceston, Tasmania, kindly donated \$100; the Retired Nurses Association of Victoria, \$20; Miss Northey, principal Mentone Girls College, \$25.

News From Friends of APK

In a recent letter to me, Stephen McClelland, secretary of Friends of APK in England, enclosed a copy of Erica Linton's latest report. Stephen is now a post-graduate student at the Institute of Development Studies, University of Sussex, Brighton, England. Erica's report is reprinted below.

Dear Friend of APK,

Our Divali gathering this year turned out to be rather a small meeting and we were sad to miss many familiar faces.

The letter which Mukat sent and which was read at meeting made us feel close to Amarpurkashi, to Mukat and his family, the project workers and of course the people in the villages.

Since reading the replies to the questionnaire which I sent earlier and the answers

which I have just received following some further questions which were raised at the meeting, I feel more than ever convinced that much more is happening and being done in and around Amarpurkashi than can be put into statistics.

If development was easy it would have happened long ago. For just on three decades projects have sprung up all over India. Any successful project should have worked itself out of existence by now, for the future of a nation cannot depend on projects. If one thinks of the massive projects undertaken and supported by the UN and bi-lateral government agencies, APK is not even "a drop in the ocean".

But we believe that what Mukat is attempting to do at APK is right. His approach

which is based on educating people, is bringing out their best and their worst. Jealousies and tensions, as well as support and loyalty, are always polarised in a society that is on the move. In the long term present successes and failures will cancel one another out. The important thing is that, to use Mukat's words; "...the level of general awareness in the project area has gone up by leaps and bounds. There is perhaps no other way in which the weakest and the most exploited can be educated so fast...". This is what development is all about. And this is why we must continue to back Mukat and his team both morally and financially.

We hope that Mukat and Jyoti will be with us when we next meet for Divali in 1978. Meanwhile let us not fail them but make a renewed effort to show that the "Friends of Amarpurkashi" are worthy of the name of "Friends". The efforts four Friends of APK have raised just over £200. Not bad at all. Just think how much we could do if every member of the society organised an event. If four people can produce this much, how about aiming at raising £1000 by next Divali to hand to Mukat and show him the metal we are made of?

Meanwhile the £200 will be used for bricking the village lanes. Mukat writes; "This is the best job because it will show the villagers have all been prepared to do

their bit."

Please keep in touch so that we can continue to send you reports.

This letter may be too late to reach you in time for Christmas. But let me nevertheless wish you the Seasons Greetings and all good wishes for the New Year.

Yours sincerely,
Erica Linton
General Secretary

P. S. To our question: Why was the Fertiliser Agency closed? Mukat writes "...The agency was started when urea was sold on the black market and poor farmers were unable to buy it at a fair price. Now the fertiliser is available to everybody and to some it is available on loan. Therefore today there is no need to duplicate the service and the agency was closed.

2. What happened to the Kisan Mazdoor Sangathan? (The organisation embracing small farmers and landless labourers)

Again Mukat replies: "The activities were suspended during the emergency for obvious reasons. Since the new Government gained power the situation is not yet clear. There is a call from J.P. for the formation of people's Committees at village level but the effort seems to be half-hearted.....As soon as the 'atmosphere' is clear there will be intensive activities under some name."

Friend Writes Comprehensive Report

I have received an extremely well written and most comprehensive report of the work here at Amarpurkashi, following the visit of my old friend Maj. Sedley Sweeney in November, 1977. I was ill at the time & unfortunately was unable to make full use of the visit of this very knowledgeable man. In his report of 11 pages, he wrote some very worthwhile comments. I have chosen a few at random.

"Many western observers think only in terms of positive plans and projects against a background of emotions in their own countries, and fail to grasp the significance of the enormous additional problems of the developing world in general and of India in particular."

"I was forced to agree with Mukat that

India cannot be written off unless at the same time one abandons hope for the world." "On the one hand, the earth seems so rich and productive, on the other, the people are so poorly nourished that it is a wonder they have the energy to continue the struggle." "Such vision, courage and determination must be supported, whatever the risk of disappointment and failure".

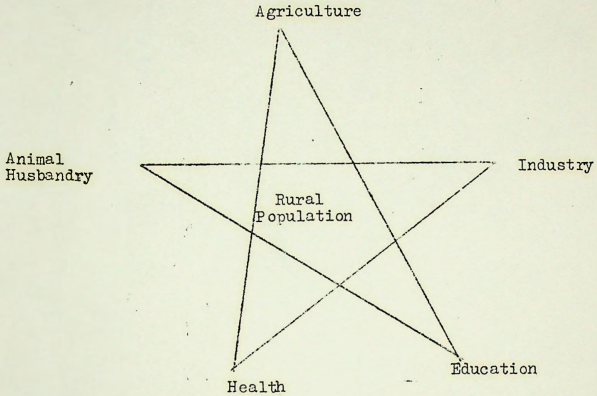
Major Sweeney has lived in India working with the rehabilitation of the Tibetan refugee children. He successfully organised and ran the Tibetan Farm School in Wales. He now works his own small "self-sufficiency" holding in that country. He is to visit and address the annual get-together of the APK friends in England. No doubt our friends will find his report as interesting as I.

Happy Ending

Former volunteer workers, Audrey Brooks and David Hunter who first met here at Amarpurkashi, have been married in a small ceremony at Teignmouth, Devon. We wish them every success in their "new project".

GRAVIS (REGD)

GRAM VIKAS SANSTHA -A Rural Development Project(Daula)



The Rising Star of Integrated Rural Development.

An Interdisciplinary Experiment in
Integrated Rural Development

A Report on Early Spadework(August, 1977)

" The aim of life is not wisdom, but action.

A. Huxley

G R A V I S (REGD.)
(GRAM VIKAS SAMITHI OF DAULA)

A REPORT ON THE ORIGIN AND EARLY WORK

CONTENTS OF THIS REPORT

GRAVIS is a Registered voluntary Body created for the purpose of helping the integrated development of a large village in U.P. and its surroundings. This project was started by certain socially oriented persons from New Delhi (whom Mr. B. G. Verghese would call Social entrepreneurs) who first came to that village with an N.S.S. camp. This report is written from the vantage point of one such person, who also happens to be the Secretary of GRAVIS.

This report has been written at a stage of our project best described as "end of the beginning". It has the following contents:

- I. Introduction - Our approach
- II. Aims and Objectives- with priorities.
- III. The Village and its People - a thumbnail sketch.
 - IV. A Historical Note.
 - V. Collaborating agencies-bold and shy.
- VI. The Starting Strategy:
 - i) Knowing the Area and the People
 - ii) The birth of GRAVIS
 - iii) Whole-time volunteerism.
 - iv) A Multipurpose Centre(MPC)
 - v) A Baseline Survey.
- VII. Youth Activities at Daula
 - i) Mahila Mandals
 - ii) Youth Clubs
 - iii) Nehru Yuva Kendra.
- VIII Or, the Anvil - forging new project.
 1. What is the Score ?
 2. Balwadis;
 3. Rural Industry;
 4. Medical consultation;
 5. Agriculture and Animal Husbandary;
 6. Sanitation.

I. INTRODUCTION - Our Approach.

GRAVIS is an innovative experiment in integrated rural development through voluntary social action. We envisage a model of rural development that compels, on the one hand, development from within through the effective use of local leadership and local resources, and that is moulded, on the other hand, from without through the collaborative efforts of an inter-disciplinary team - a team which alone can do justice to the total spectrum of social reality. To abstract only one component of this reality is to do violence to the whole structure.

The primary focus of all our development and other activities must be the underprivileged, the unemployed, the under-employed, the indigent, the sick and the vulnerable. Even if we have to make a beginning with the educated and better-off sections of the rural society, we have to keep in mind "The last man". He is often diffident and ignorant, shrinking from contact with the unfamiliar outside world. Under such conditions provision of medical treatment at the doorstep can be a great asset in disarming suspicion and establishing rapport. (It is a physician who is saying this from personal experience).

Apart from self-help, we attach great importance to youth power and its effective channelization through constructive outlets. We believe that the educated young men and women of our villages have the potential strength to spearhead the silent social revolution that most of us wish to see and catalyse. They can produce the leaders of tomorrow and can prove the most powerful engine of social change. Therefore we have given top priority to the mobilisation and organisation of village youth and to the identification and training of youth leaders. This will be supplemented by appropriate practical experience and in-service training so as to equip the young men and women for their future roles in rural development.

II. AIMS AND OBJECTIVES:

GRAVIS is an exercise in comprehensive area development. It was formed with the principal aim of helping the people of Daula achieve integrated development, with the people below poverty line receiving special attention. Creating fresh opportunities for the employment of the unemployed and under-employed will become our increasing concern.

The main components of integrated development are well known. Our version is given below:

1. Agriculture
2. Animal husbandry
3. village industry
4. Education, including - Adult(non- formal) education or functional literacy.
Basic education
Vocational training
Health Education etc.

5. Health - including:

Nutrition
Sanitation
Maternal and Child Health with family planning.

6. Special programmes for special groups:

For Children -Balwadis
For young women- Mahilla Mandals
For young men - Youth clubs etc.

Of course the enumeration above gives no idea of our efforts at community organisation; the mobilisation and organisation of special groups; the identification and training of key persons; the careful nursing of new institutions; the creation of organisation infrastructure; the availability of resources; the consultations with the community and the experts; etc. all this activity must precede and accompany what is given in the list above.

The Priorities:

Our top priority is helping the under-privileged, especially by creating new employment. But priorities are governed to a great extent by practical considerations. We have followed pragmatic considerations and tried to steer a middle course between what should be and what can be.

We attach great importance to our youth programmes and have organised youth groups such as Mahilla Mandals and Youth Clubs. Due to the collaboration of A.I.I.M.S. we could start health services and health education from the very beginning. These activities will be strengthened.

Our next step will be establishment of small scale rural industry, such as weaving or leather work. A nucleus for these industries is already present and employment can be generated without much training. Some educational activities have also been started for adults and for non-school going children.

Balwadis (or day-croches) for the under-privileged children, with nutrition supplementation, immunisations and health check-ups must be given top priority.

Agriculture and animal husbandry constitute the very foundations of rural society. However, our farmers are relatively better off. The small farmer may require help first.

As can be seen from the preceding, an unequivocal ranking of priorities is not practicable. Perhaps our focus will be sharpened once we complete our baseline survey.

III. THE VILLAGE AND ITS PEOPLE:

Daula is a large village in District Meerut of U.P. It is situated to the north-west of Delhi and about 60 Km. from it. It is located on the Bagpat-Meerut state highway about 11 Km. from Bagpat.

Population:	10,000 (approx.)
Total area:	2596 Acres
Agricultural land:	2178 "
Irrigated land:	2108 "

Daula is a Rajput dominated village, with Rajputs accounting for more than one-half of the population and most of the agricultural land. They are culturally orthodox; their economic condition is relatively better.

All the other castes are well represented. The scheduled castes add upto over one quarter of the total population. There are a fairly large number of Moslems, with three mosques in the village. Different castes and communities live amicably. There is a gram Panchayat which is not very effective. The village, though not a block headquarters has the block primary health centre and a veterinary dispensary located in it. It is an important bus-stop for Meerut Bagpat traffic. Daula also boasts of a country-liquor shop. It has a large and useful pool of educated young men and women.

IV. A HISTORICAL NOTE:

The project grew out of the 3 N.S.S. camps that the N.S.S. Unit of All India Institute of Medical Sciences held at the Daula village. They were held in May 1976; Dec. 1976 and May, 1977. Delhi University N.S.S. volunteers under the overall guidance of Prof. P.L. Govil joined the first two camps (in 1976). The distance that we have travelled may be gauged from the fact that when we first camped at Daula, we as the medical contingent from All India Institute of Medical Sciences became the focus of the concentrated hostility of the entire village- the whole village achieving unanimity for the first time in its 200 years long history. The reason can be easily surmised. It was only when some of the more foolhardy young men of the village visited our camp, and returned to their hearth and home with small but important bits of their anatomy intact, that the villagers heaved a communal sigh of relief.

That was the beginning. However, during the second N.S.S. camp we were greatly impressed by the cooperation and the enthusiasm shown by the young men and women of Daula. We decided to "adopt" Daula for the N.S.S. activities. At the same time we started consulting people with experience or expertise in the field of rural development. It was Mr. Antiago of Indo-German Social Service Society who first suggested the creation of a voluntary agency. Gandhi Peace Foundation was willing to join hands with us, thanks to Mr. K.K. Mukerjee. It helped us with catalytic funds, and gave us a social worker of great promise, who is prepared to stay permanently at Daula- that is, Shri Ramesh Sharma, now Executive Secretary of GRAVIS. Finally Mr. Satish Chandra, the dean of rural experts, agreed to head GRAVIS. All these developments helped to strengthen the resolve of us workers to continue with our effort for Daula. One individual who was in evidence during all these stages was Dr. J.S. Gill of the N.S.S. Unit of the All India Institute of Medical Sciences- the Secretary of GRAVIS.

V. COLLABORATING AGENCIES:

We have had the good fortune to receive the help or promise of help- of a large and increasing number of agencies including specialized and funding agencies, governmental and non-governmental. Other agencies have assured help once we are in a position to absorb their help.

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The list given below is not complete. Some of the agencies listed below are only represented by an individual or a small group.

1. All India Institute of Medical Sciences through its N.S.S. Unit and Centre for Community Medicine.
 2. Gandhi Peace Foundation.
 3. Delhi School of Social Work, Delhi University.
 4. Gram Niyojan Kendra, Ghaziabad.
 5. H.S.S. - It has helped us in many ways and at many levels.
 6. GRUP- Architects and Engineers.
 7. Pantnagar University of Agriculture & Technology through its Extension Centre at Meerut.
 8. U.P. Govt. Development organisation at Block, Tehsil and District level.
 9. District Meerut Health organisation and its P.H.C. at Daula
 10. Lady Irwin College, New Delhi.
 11. Nehru Yuva Kendra, Meerut.
 12. Ministry of Agriculture and its Director of Rural Development, (Public Corp.).
 13. Khadi and Village Industries Commission.
 14. Indo-German Social Service Society (IGSSS), New Delhi.
 15. Christian Children Fund (CCF), New Delhi
- And several others.

VI. THE STARTING STRATEGY:

Under Starting Strategy are described some of the steps undertaken for the purpose of strengthening our base at Daula and for striking firm roots into the soil. Five of the more important steps are described below:

(i) Knowing the Area and the people

Efforts at establishing close contacts with the people of Daula began with our N.S.S. camps. The processes of increasing friendships and emotional integration were helped by the following activities/interactions:

- a) Combined "Shramdan" activities
- b) Inducing village youth to visit our N.S.S. camps and share our camp life.
- c) Formal and informal meetings with the village people, village leaders and village Panchayat.
- d) Film shows and other health education activities such as mobile health exhibitions and nutrition demonstrations.
- e) Medical care, including home visits and referred to Delhi hospitals was made available by All India Institute of Medical Sciences through H.S.S.
- f) Our involvement with the village youth in Mahila Mandals and Youth Clubs quickly brought the urban and village youth together.
- g. Taking village youth on a conducted tour of Delhi including visits to Cottage Industries Emporium and Lady Irwin College to see the type of handicrafts that are popular in Delhi.

- h) Making available several types of services to the local people by contacting other agencies (such as Nehru Yuvak Kendra)
- i) Baseline survey. Home visits were utilized for explaining our work and the need for their cooperation.
- j) Visits of various other experts also helped.

Due to this constant involvement of village people in all our activities, not only have we grown very close to each other and several personal friendships have sprung up between the two groups. Eventually we should develop the tradition that all development and/or welfare activities are collectively discussed and jointly executed.

(ii) Birth of GRAVIS.

This voluntary agency was constituted to help us achieve the objectives of our programme. It has a general body, a Karyakarani, and an executive with a President (Shri Satish Chandra), a vice-President (Shri Udaybir Singh), a Secretary (Dr. J.S. Gill) and a Joint Secretary-cum-Treasurer (Shri Ramesh Sharma)-the last named is a Social Worker belonging to Gandhi Peace Foundation who will permanently stay at Daula with his family. Majority of the members of GRAVIS belong to the village, the rest being voluntary workers from Delhi who initiated the whole project. GRAVIS was registered as a voluntary agency with the U.P. Government under the Societies Registration Act 1860 on 30th July, 1977.

The objectives and the constitution of GRAVIS has been so framed as to provide the necessary institutional underpinning for various development and welfare programmes. GRAVIS will channelize all such activities. It will help secure financial, technical and other help for various development projects. It will provide secure basis for development aid or loan. It can also buy equipment or employ people. GRAVIS established a permanent office at Daula. A lot of work is also carried out from the office of the Secretary, Dr. J.S. Gill, at the All India Institute of Medical Sciences, New Delhi.

(iii) Whole-time Volunteerism.

"Any worthwhile project in integrated rural development cannot be run as a hobby of a few do-gooders" (Anon). It is essential to have a competent whole-time social worker who is prepared to stay in the rural areas as a matter of choice. GRAVIS is fortunate in finding in Mr. Ramesh Sharma the right kind of person, who wants to dedicate his life of rural uplift. Mr. Sharma has a distinguished record as a Youth leader and a Social worker. This is the present that Gandhi Peace Foundation has given to GRAVIS, and one expects nothing less from such an organisation.

Mr. Ramesh Sharma was associated with our work right from the beginning. He has received special training in agriculture, health and accountancy preparatory to joining us. He has selected a small house in Daula and has started living in that village from mid-August. Ultimately he will shift to the Multipurpose Centre (MPC) once it has been built. He is also the Executive Secretary-cum-Treasurer of GRAVIS. He will look after the day to day working of GRAVIS.

His helpmate, Mrs. Sudha Sharma, has proved an additional bonus for GRAVIS. She is an educated young lady who wants to share her husband's vocation. Currently she is receiving training in sewing, handicrafts, health and community organisation. She will join Mr. Sharma at Daula in about 2 months. She will be a great asset in mobilizing the woman power of Daula to take their rightful position along with their menfolk. She will also be a help in organising special programmes for women and children, such as Mahila Mandals and Balwadis (vide infra).

(iv) Multipurpose Welfare Centre (M.P.C.)

A centrally located old village "Chaupal" (a community property) was selected (from among several offers) as the site for our Multipurpose Welfare Centre. The old building was dismantled through Shramdan (voluntary labour) the village people have donated the land and the salvaged material from the old building to GRAVIS. They also agreed to contribute Rs. 5000 and Shramdan for our M.P.C. which will be built on that site.

Mr. Romi Khosla, an Architect belonging to the voluntary associated "GRUP" visited Daula several times. He not only helped us in selecting the site, but also prepared a plan and a cardboard model of the M.P.C. His help will again be sought at the end of the monsoons, when the construction of the M.P.C. will start.

The M.P.C. will be the physical headquarters of GRAVIS at Daula. It will house our office and our permanent representative with his family. The large central hall will provide a convenient site for Balwadis or Mahila Mandals and also for meetings of various groups such as the youth groups, special committees, general body of the GRAVIS, etc. We could also possibly start a reading room and a small library there.

Furthermore, M.P.C. will have a guest room for the stay of GRAVIS people coming from Delhi.

During his visit to Daula, Dr. Pal Choudhari, Director of Rural Development (Public Corp.) offered to give us additional financial help to complete the building of the M.P.C.

(v) A Baseline Survey.

During the last N.S.S. camp (May, 1977) a baseline survey of the whole village was initiated. The survey covered basic demographic, socio-economic and agricultural data. The extension wing of Pantnagar Agricultural University located in Meerut were kind enough to send their experts to Daula. They advised us on the agricultural component of the survey. Thus we collected information on family composition, educational status, occupation, unemployment, size of land holdings, crops grown, irrigation facilities, agricultural equipment, live-stock, financial help etc. During the camp only one-half of the village could be covered. Now we are training 5 educated village young men to complete the survey.

Now a survey is not essential to either identify important problems, or take remedial measures. But it sharpens our focus on the village and helps in the details of planning. In fact, we propose to prepare a comprehensive development plan for the village after the data has been analysed and various experts consulted. The survey also helped in bringing us close to the various sections of Daula population

VII YOUTH ACTIVITIES AT DAULA

Significantly enough, our contact with Daula started because of youth activities (N.S.S. camps); and was strengthened by the response of the village youth. There can be no doubt that the youth of India, particularly the educated young men and women are our most important resource. We should develop this resource into an effective agent of rural uplift and social change.

Several young men of Daula have received higher education and left for the cities to seek better prospects. However, there are still a large number of educated young men and women, including graduates, who continue to stay at Daula. Most of them feel frustrated and find their lives aimless and constrained. This is particularly true of the young women. Therefore any opportunity for them to come to-gather and direct their energies into constructive channels evokes instant enthusiasm. At least this has been our experience.

These educated young people have been our greatest asset in the village. On our encouragement, Mahilla Mandals and Youth Clubs sparing to life. It will be one of our essential tasks to identify potential leaders, provide them with suitable training and experience, and utilize their talents in running some of our development other projects. Many new jobs are going to be created in Daula, including jobs of responsibility. It is much better to train the local youth rather than import trained manpower. This may also help stem our internal brain-drain- the migration of rural talent to the cities.

It is not too much to hope that these youths, once they have gained sufficient experience and confidence, may be able to take our place, releasing us fresh pastures. A more detailed account of youth organisations follows:

i) The Mahilla Mandals:

Three Mahilla Mandals with an individual membership of 15-20 are now functioning energetically at 3 sites: Panchayat house "3- Bisa" and "11-Bisa" areas. More are bound to emerge as our activities expand.

Activities:

1. Teaching children between 6-12 years who are not attending school. The girls are taking their teaching duties very seriously each girl looking after 5-10 children. Teaching aids have been provided by Nehru Yuvak Kendra, Meerut.
2. Adult literacy classes - Several old women are learning to read and write at the Mahila Mandals.
3. Training sewing, tailoring, embroidery and handicrafts. - The Mahila Mandals girls are very keen to add to their accomplishments and, if possible, also to their purse. Five sewing machines were loaned by the Delhi School of Social Work. One special teacher has been recruited, more are needed. Her salary is paid partly by the girls themselves and partly by the N.S.S.

..... 9/-

Some of the girls are quite talented and produce beautiful handicrafts. They are keen that their handicrafts should serve as a source of supplementary income. However they need a little training and advice on modern designs and methods. For this purpose we arranged for the girls to visit Lady Irwin College and Handicrafts Emporium, New Delhi. Lady Irwin College may actually start some regular programme in the village from their next academic session (Aug. 1977) Problems of raw materials and sales outlets will have to be tackled.

4. Health education, especially on infant feeding and care - Mobile exhibitions were held. Practical demonstrations were arranged for the village women on how to cook cheap nutritious foods, especially for children. They were immensely popular.

5. Recreation, Music, prayer sessions -

Other activities are being planned - for example, care of destitute women and women's welfare.

ii) Youth Clubs

The young men of Daula constitute a dynamic group that has given us lot of help. In order to encourage them to organise themselves, a youth club has been started, with a special sports wing. The most active members include Rana Rajinder Singh and Ajit Singh. However so far we have avoided formal structuring of such institutions and have allowed free growth. The youth club has proved to be an effective organisation that can be assigned specific responsibilities.

iii) Activities of the Youth Club include - adult education, social service, sports and cultural activities. Kanwar Rajinder Singh, Incharge Nehru Yuva Kendra, has trained three young men to carry out adult education. He has provided the necessary books, stationery etc. and each young educator gets an honorarium of Rs. 60/=. The Nehru Yuvak Kendra has also sanctioned some sports equipment for the sports club.

A leadership training programme is in the offing. I have no doubt that it is the youth of this village who will transcend the divisive influence of caste and creed and who will spearhead the modernisation of our village - using "modernisation" in the sense of Gunnar Myrdal (Asian Drama).

VIII ON THE ANVIL

In this section are discussed some of the programmes that may be taken up in the near future. But before we can talk of future projects we must take a good look at the present prospects.

What is the Score ?

We have worked hard and we have looked around. How to assess our present condition, our assets and liabilities. What is the Score ?

Our Assets.

We have established rapport with all sections; and the people are prepared to contribute their share to the development effort, both as money and as Shramdan.

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We have created a nucleus of dedicated workers.

GRAVIS has been duly registered.

A trained young dedicated husband-wife team has joined us. They will stay in the village and work whole time for GRAVIS.

A large number of agencies and persons have offered us financial and technical assistance.

We are an interdisciplinary organisation-with most relevant disciplines represented.

A. P.H.C. and a veterinary dispensary are already located at Daula.

Our Liabilities:

We have not been able to establish close contacts with the local Block and District offices, particularly with the Block Development staff. (This was mostly due to lack of time and must be soon rectified).

The dominant Rajput community of Daula is both orthodox and faction ridden. Therefore the local Panchayat is practically defunct. An effective Panchayat with several special sub-committees, can be a great asset.

The local P.H.C. and Veterinary dispensary are in very poor shape. Appropriate District officials will have to be contacted.

There is no tradition of cooperative work.

Daula has one country liquor shop and drinking is rampant.

We have to make the best of what we have, and try to reduce the liabilities. New projects must be forged and put into operation by the next year.

Evaluation.

All these individual programmes should have some sort of built-in evaluation. This is only possible if the objectives are clearly defined, and routine monitoring is an integral component of the project.

Below are described some short-term or long-term programmes that can be taken up next year:

1. Balwadis(or creches or under-6 clinics)

Already some beginnings have been made. Each Balwadi will have 25-30 two to six year old children left there by their mothers in the morning and collected after 4-6 hours. These children will be looked after by a specially trained local educated girl or matron.

These Balwadis will provide healthy and congenial environment, where children, irrespective of their caste or economic status, would be brought together and looked after.

The activities of Balwadis will include-

Play

Non-formal education

Cleanliness of person and of surroundings

Supplementary feeding by cheap local food

Growth record(including height and weight)

Immunisations

Periodic health check-ups

Treatment of minor ailments

Referral facilities if child looks seriously sick

Education of mothers in child feeding and rearing, etc.

2. Education.

Education is basic- basic to any process of social change. Perhaps it would not be incorrect to say that the primary role of GRAVIS is educational.

The educational standard of Daula can be raised by ensuring better attendance at schools and by organisation of functional literacy classes for adults. Nehru Yuva Kendra is already helping with literacy programmes.

Special educational courses will have to be designed to train Daula youth to take up specific responsibilities, such as running Balwadis, managing rural industries, teaching sewing and handicrafts to Mahilla Mandals etc. Furthermore, refresher courses, advanced courses and in-service training must be organised to achieve high standards of performance.

3. Small scale Rural Industry.

It is essential to provide regular employment to the poorer sections- the Harijans and the landless. Establishment of a rural industry, or even a centre of rural industries, will be undertaken in consultation with Khadi and Village Industries Commission. We are already in contact with the Commission.

Spinning and weaving industry should be easy to promote as there are already skilled weavers in the community. Their economic condition is very unsatisfactory (some play brass bands on marriages for a little extra money).

There are also a large number of cobblers in that village. A few are skilled. Others will require training. A tannery, or some other variety of leather industry may be started as cattle skins are available locally.

Khadi and Village Industries Commission can help us with training, financing and marketing. The Commission has agreed to start working at Daula because of GRAVIS. Because such a registered and permanent agency can secure their investment, and make it generally easy for the Commission to operate in that area.

4. Medical Consultation.

As an extra service, A.I.I.M.S. specialists can visit Daula according to a mutually convenient schedule about which the villagers are kept informed. Suitable cases may be referred to the A.I.I.M.S. Hospital, New Delhi. They may even be taken there in the same transport, used by the specialist. Such a programme is a great help in establishing rapport, creating goodwill and securing cooperation of the village people- especially the weaker sections of rural society.

A Medicine Chest is already being maintained for emergency and other purposes. Medicines are provided free to most people.

5. Agriculture.

As non-availability of good seeds is a recurring problem it may be possible to secure good seeds for Daula on a "once-only" basis and then asking some farmer to multiply the seeds for all those who want them.

The local school has a Department of Agriculture, and a lot of agricultural land for training and demonstration purposes. At the

moment this facility is doing little for the village agriculture. A lot can be done with a little interest and imagination. Seeds can be multiplied, different agricultural practices can be experimented with and demonstrations can be arranged, relevant to local conditions and practices. Newer techniques can also be first tried and demonstrated on this land.

6. Animal Husbandry.

There is a Veterinary Dispensary in Daula that is usually closed. It can provide better services if the District authorities are approached.

Artificial insemination of milch cows is another service that may be provided.

7. Sanitation.

Our villagers are accustomed to a very low level of environmental sanitation even when the houses themselves are kept spotless. All the usual problems seen in other villages are seen in an exaggerated form in Daula. Drains are absent or blocked, with streets full of muck or worse. There are a large number of ponds, doubling as cess-pools. Refuse accumulates everywhere. Drinking water comes from open wells. There are no latrines, biogas plants or smokeless "chulahs". A really imaginative approach to the whole problem is required.

One of the major problems of rural sanitation is the low priority accorded to it by our people. Therefore we must start with a good health education programme. School children respond enthusiastically to good programmes of health education and often carry the message home to their un-educated parents. Every man should be told how disease spreads and how to check it. Sometimes environmental sanitation programmes can hitch a ride on the back of other primarily developmental projects- such as utilizing deep tube wells to obtain safe drinking water.

A comprehensive drainage plan must be prepared after a detailed contour map of the village becomes available- as the Roorkee University has promised. Only after the construction of proper drains (and the accompanying paving of village streets) can we consider the installation of a piped water supply system from an overhead reservoir.

A gobar gas plant can be easily installed. Popularization of a suitable, clean, odourless latrine of hand-flushing variety, is a tall order. But at least a beginning can be made for demonstration purposes, by constructing a few such latrines in the homes of the wealthy farmers. Furthermore, a latrine programme can be easily subsidised. Provision of free latrines is against the general policy of GRAVIS.

CRYSTAL GAZING.

It is difficult to say anything meaningful about the long-term future of such a project.

It is only appropriate that the experience and skills of people who have worked at Daula should find wider application. At the same time the question of replicability should always be kept in mind. As far as possible, one should use normal channels and usual procedures for rural development, without at the same time losing sight of cost or efficiency.

Expansion can take two forms. We can expand laterally from Daula, involving adjoining villages by and by. This is easy as the adjoining areas already familiar with our performance and our approach. Or we can start new foci of activity in relatively distant places. Such a step would require greater preparation and adaptation. However, it may prove more challenging and interesting - thus evoking greater enthusiasm and innovative participation of younger workers. Perhaps both approaches can be tried.

- DR. J.S. GILL

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'THE VILLAGE HEALTH SERVICE' AN EXPERIMENT IN
PRIMARY HEALTH CARE AS PART OF THE COMPREHENSIVE
DEVELOPMENT PROJECT FOR THE TRIBALS

by

Dr. Ragini Prem,
Agrindus Health Project, Banbasi Sewa Ashram,
Govindpur, District Mirzapur, Uttar Pradesh.

'Village Health Service' an experiment in primary health care is worked out as a component activity of the comprehensive development programme conducted by Banwasi Seva Ashran in the backward tribal area of Mirzapur district of Uttar Pradesh. The project covers four community development blocks an area of 1500 sq. miles. The Village Health Service has four links: i] Swasthya Mitra (Health guide) - a voluntary village worker in each village; ii] 'Village doctor'- a person trained in health, family planning and treatment of common ailments and supported by 'Gram Kosh' (Village fund) for a group of villagers; iii] a small hospital with doctors, services for a group of 80-100 villagers and iv] a hospital with the services of a physician, a surgeon and obstetrician and facilities for investigation for a group of 300-400 villages.

The experiment started 12 years ago with the establishment of a centre of the third link. The centre took the responsibility of mobilising people in favour of the scheme, educating them in health and family planning and training personnel for the health service. Health, family planning and medical care form an integral part of the health service. In the project area now there are about 50 Swasthya Mitras and 9 centres of village doctors. Very recently, an evaluation of the comprehensive development project (including health service) has been completed by the Agricultural Finance Corporation of India. The findings indicate that people have become aware of the health problems, are in favour of the idea of the Swasthya Mitra and the village doctor and are willing to create a village health fund.

COMMUNITY HEALTH CELL
47/1, (First Floor) St. Marks Road
BANGALORE-560001

Introducing:

Gram Vikas Sanstha - GRAVIS (Daula)

Dr. J. S. GILL

GRAVIS is an innovative experiment in integrated rural development through voluntary social action. We envisage a model of rural development that compels, on the one hand, development from within through the effective use of local leadership and local resources, and that is moulded, on the other hand, from without through the collaborative efforts of an inter-disciplinary team—a team which alone can do justice to the total spectrum of social reality. To abstract only one component of this reality is to do violence to the whole structure.

The primary focus of all our development and other activities must be the underprivileged, the unemployed, the under-employed, the indigent, the sick and the vulnerable. Even if we have to make a beginning with the educated and better-off sections of the rural society, we have to keep in mind "The last man". He is often diffident and ignorant, shrinking from contact with the unfamiliar outside world. Under such conditions provision of medical treatment at the doorstep can be a great asset in disarming suspicion and establishing rapport. (It is a physician who is saying this from personal experience.)

Apart from self-help, we attach great importance to youth power and its effective channelization through constructive outlets. We believe that the educated young men and women of our villages have the potential strength to spearhead the silent social revolution that most of us wish to see and catalyse. They can produce the leaders of tomorrow and can prove the most powerful engine of social change. Therefore we have given top priority to the mobilisation and organisation of village youth and to the identification and training of youth leaders. This will be supplemented by appropriate practical experience and in-service training so as to equip the young men

and women for their future roles in rural development.

Aims and Objectives

GRAVIS was formed with the aim of helping the people of Daula achieve integrated development, with the people below poverty line receiving special attention. Creating fresh opportunities for the employment of the unemployed and under-employed will become our increasing concern.

We have followed pragmatic considerations and tried to steer a middle course between what should be and what can be.

We attach great importance to our youth programmes and have organised youth groups such as Mahila Mandals and Youth Clubs. Due to the collaboration of A.I.I.M.S. we could start health services and health education from the very beginning. These activities will be strengthened.

Our next step will be establishment of small scale rural industry, such as weaving or leather work. A nucleus for these industries is already present and employment can be generated without much training. Some educational activities have also been started for adults and for non-school going children.

Balwadis (or day-creches) for the underprivileged children, with nutrition supplementation, immunisations and health check-ups must be given top priority.

Agriculture and animal husbandry constitute the very foundation of rural society. However, our farmers are relatively better off. The small farmer may require help first.

An unequivocal ranking of priorities is not

Community Health Project, Lalitpur, Jhansi Dist.

1. Started in March 1976
2. Coverage 1 village.
3. Activities
 - a. A weekly consultation clinic inc. health talk and demonstration, MCH and other referrals by VHWs at village.
 - b. VHW will concentrate on MCH prevention and deliveries.
 - c. Village Health Committee decides on village health.
 - d. Supply of medicines at cost price
4.

<u>Personnel</u>	-	<u>Training</u>
Doctor	1	
Midwife/lab. technician	1	Hospital based
Paramedical worker	1	
VHWs (F)	2	Weekly at village over 40
VHW (M)	1	weeks plus training through
Volunteers when needed...		the weekly clinic (Community based)
5. Supervision & Records. Supervision is at weekly clinic by headoffice staff (Delhi) periodically. Medicine rates given to village panchayat to check rates charged by VHW.
6. Community & other participation. Choice of village is dependent on cooperation of panchayats; agreement to pay VHW's salary at rates hospitals are party to; establishment of village health committee; building availability for clinic; villagers pay for our medicine. Government DMO is consulted in choice of village that are to be taken in the twilight area of the PHC/SCs
7. Sponsorship/funds. Harriet Benson Memorial Hospital (under the Emmanuel Hospital Assn. of India, Delhi). Anticipate funding from agencies abroad for 3-5 years. Community contributions as above. Government contributions for vaccines/iron folic acid and vitamin A; some FP teaching materials are dependent on govt. stock position.

5. Supervision/Records. Personnel b, g, h, routinely supervise relevant activities/personnel.
6. Community & Other Participation. The VHW is recommended by the villagers. Medicines are supplied at cost price and revolving fund is thus created.
7. Sponsorship/Funds. Department of Social Welfare, Tamil Nadu and partially under 46 village scheme, the Associated Country Women of the World/Royal Commonwealth Society for the Blind, London
8. Evaluation. Analysis is made on pre and post statuses, reduction in higher grade malnutrition, xerophthalma, common illness prevalence was noted. Long term effects have been studied. Retention of improved grades was high.
9. Problems.
 - a. lack of availability of fresh vegetables;
 - b. fear of children being made sterile by eating what was thought to be some mixtures in the supplementary nutrition;
 - c. one block has poor communications;
 - d. lack of purchasing power, especially due to the drought leading to inability to use even the cheap diets advised;
 - e. low wages leading to large turnover;
 - f. paucity of funds for needed drugs;
 - g. inadequate staff for follow-up.
10. Outlook. To have under fives register in all villages; complete birth registration; recording of health/nutritional statuses to identify 'at risk' children, supervisors to modify plans to get better and lasting results.
11. Contacts: Dr A. Venkataswamy; Dr K.A. Krishnamurthy (Prof. of Paediatrics)
12. References: G. Venkataswamy "Child Care Centres in 100 and 46 villages", paper presented at the National Symposium on "Alternative Approaches in Health Care Delivery Systems".

27
No. 2501

Health
Delhi

Community Health Dept. Holy Family Hospital, Okhla

2. Coverage: 20,000
3. Activities: MCH; Nutrition
4. Personnel & Training: Recently training VHWs (to reduce costs).
9. Problems. In 1975, villagers were shifted for resettlement, making unemployment a problem as well as health.
11. Contact: Sr. Anne de Souza
12. Reference: VHAI

Note: No information available on items 1, 5, 6, 7, 8, and 10.

M. Pedro F. French Circle
SP. John. And College
Bangalore



Vigyan Shiksha Kendra

COMMUNITY HEALTH CELL
47/A, (First Floor) St. Marks Road
BANGALORE - 560 001

ATARRA
BANDA
UTTAR PRADESH
INDIA

59-5

UTTAR PRADESH - 6

MEMBERSHIP OF THE VIGYAN SHIKSHA KENDRA:

ACTIVE MEMBERSHIP: Open to anybody who is interested in VSK's activities in the field of science popularisation, education and rural development. An active member has to contribute Rs. 500.00 at a time, or Rs. 25.00 annually, and has to help VSK in planning and carrying out its work.

GENERAL MEMBERSHIP: Open to school teachers or students who are interested in the objectives of VSK. A general member has to contribute Rs. 10.00 annually. For students a 50% reduction is given.

For further details please contact: Dr. Bhartendu Prakash,
Convener,
Vigyan Shiksha Kendra,
Atarra,
Banda District,
Uttar Pradesh.
Pin: 210201
INDIA

VIGYAN SHIKSHA KENDRA

An Introduction:

The Vigyan Shiksha Kendra (Science Education Centre), is a registered voluntary organisation* and was set up in 1973 by a group of young scientists wanting to undertake an experiment in integrated rural development through education and the popular application of science and technology. The group felt it was important to work with the direct participation of the village community, interacting with scientists, technologists, educationists, and social workers. The work was taken up in the district of one of the group members, with the help of the local educated youth.

The Vigyan Shiksha Kendra (VSK) is in *BANDA*, a south eastern district of Uttar Pradesh in the backward Bundelkhand region. VSK maintains an office in Atarra, a centrally located town of the district. The development work has been taken up in two village clusters; the village centres being at Aau (5 km north of Atarra) and Terahi-Maufi (25 km north-east of Banda), together these centres serve a total of 15 village units.

The objectives of VSK are as follows:

- (1) To popularise science in rural areas and to develop science education in general to make it more relevant to village life;
- (2) To impart industrial training to the rural youth, and to help them in setting up their own industries suited to local resources and needs, eventually enabling them to become self-reliant,
- (3) To organise extension service in education, health, and agriculture to aid the social and economic uplift of the community.

*Registered under the Societies Registration Act 21, 1860.
Registration number: 1482/73-74

THE PROBLEM:

VSK worked for three years on various projects designed to meet the felt needs of the area. During this time many problems arose which were dealt with individually. It was felt that it was important to undertake a comprehensive survey of the area, so that a more clear picture of the problems and potentials could be obtained, thus allowing a comprehensive strategy for development to be formulated.

The survey was carried out during 1976-77, in the 15 villages of the two village clusters surrounding Aau and Terahi-Maufi. It revealed some of the root causes of poverty, which is the major problem for the lower and middle strata of the rural population. These causes appear to be:

- (1) The majority of the population consists of the landless, and the small and marginal farmers. The means of production as well as a disproportionately large share of the village land is in the hands of a few farmers, and the landless have to depend on them for their livelihood;
- (2) Agriculture is the only source of production and occupation, and there is a lack of any other sizeable source of employment for the villagers;
- (3) There is exploitation (both conscious and unconscious) of the majority of the village community by a few in and outside the village through:
 - (a) Money lending at very high rates of interest;
 - (b) low wages to the labourers;
 - (c) very low prices for the agricultural produce;
 - (d) complicated judicial procedure, causing a delay in justice, and that too at high cost;
 - (e) delay and injustice in land-reforms and land re-allocations, and finally
 - (f) control of the marketing and processing centres by non-producers, particularly from the upper strata of society.

The survey also revealed very clearly that so far, development inputs like the facilities created at the Community Development Block level or the credit given by the nationalised banks have almost totally been consumed by the rich and influential farmers, the middle men of the Government and the various private agencies. The poor have continued to grow poorer.

It is clear that land is the most important factor contributing to power in the village. The situation is, that even if land-reforms and re-allocation measures were effectively implemented, there is hardly any chance for all the landless families to secure an economically viable piece of land individually. Thus, though there is a need for land-reforms it is essential to work for structural changes in the society to allow for the cooperative management of the land. The basic problems of the landless peasantry have to be solved; the condition of the agricultural labourers need to be improved, and alternative sources of employment have to be created for the underemployed and unemployed. For this, the problem groups i. e. the landless and the marginal farmers have to be strengthened on an organisational level to struggle for an improvement in their socio-economic situation and play a self decisive role on the socio-political front.

STRATEGY FOR DEVELOPMENT:

Before the survey was carried out the strategy for development of the area was less clearly defined, and the projects taken up in the two village clusters were as follows:

- (1) **SECONDARY SCHOOL:** This was started to develop and transform the science curriculum and the teaching process in general, prior to it this had been carried out in various separate schools in Banda district. It was decided that this was expensive in time and resources, so a school was set up in the Aau centre. It admits post primary students from the six villages around Aau for their secondary education. The discovery approach (learning by doing) has been introduced, and the students are given a vocationally oriented training, inculcating in them a sense of discipline, love towards their society and a respect for labour. The school has served as an important link between VSK and the village communities; and is being developed as a High School which is to be handed over to the people of the area soon.
- (2) **AGRO-INDUSTRIAL TRAINING:** This project was aimed to train village youth in agriculture, dairying and various village industries suited to the locality. A number of seasonal training camps have been held in previous years for the benefit of the farmers of the associated villages. The programmes under this project are:
ASHMOH CEMENT PILOT PLANT: A small scale industrial pilot plant was set up in Aau in 1976 to manufacture cement from the ash of the rice husk, and other readily available materials such as lime (it is called Ashmoh cement) by a process developed by Prof. P.C. Kapur of the Indian Institute of Technology (IIT) Kanpur. This programme is being carried out in close collaboration with the IIT. Ashmoh is an all purpose cement, and has great potential as a rural industry, providing a valuable material for cheap housing, manufacture of well-rings, irrigation channels and bricks etc. Together these are bound to generate extra employment potential for the village youth.

DEMONSTRATION IRMING AND BIO-GAS PLANT: Several demonstration plots at Terahi-Maufi and Aau were managed by VSK for the farmers of the respective area; this has helped us in successfully transmitting the importance of high yielding variety seeds, proper irrigation and optimum use of fertilisers etc. A 150 cft. Biogas plant set up at our Aau centre has attracted hundreds of local farmers and their families. They are now in a position to accept Bio-gas as an alternative domestic fuel.

- (3) **MAHILA-SADAN PROJECT:** This was started mainly to train village women and girls in tailoring, knitting, and simple toy-making. At the same time, subjects such as child care, nutrition, health and hygiene etc. are taken up, especially with the adult women who participate in the project.
- (4) **SOCIO-ECONOMIC SURVEY OF THE 15 VILLAGES:** As outlined above this survey was carried out in the 15 village units of the two village clusters surrounding Aau and Terahi-Maufi. This was done by interviewing over 80% of the total house-holds of the area in a number of visits throughout the year, meeting and discussing the village situation with village people and the local youth.

Since the completion of the survey there has been a change in the working of VSK. The group, which started with an institutional approach to education as well as village-development through the provision of necessary services and general reforms etc., has now changed its concept of rural-development to one where youth organisations work as catalytic groups, thus enabling rural-development through the peoples' own efforts rather than through externally acting forces. This conceptual change has occurred due to closer contact with the local communities through field work, education and the survey on one hand; and contact with other action groups, development workers and agencies on the other.

Thus from 1977 onwards VSK has devised its strategy for development on flexible lines, and has concentrated its efforts into the following programmes:

- (A) Agro-Industrial training to the youth of the communities of landless and the small farmers enabling them to become self-dependent and capable of organising their community around a necessary service or village industry.
- (B) Development of local action groups of village youth to extend to the people services relating to: (i) agriculture, (ii) marketing, (iii) health, and (iv) education; and to strengthen the 'receiving mechanism' for using the facilities provided by the local Government agencies and the banks.

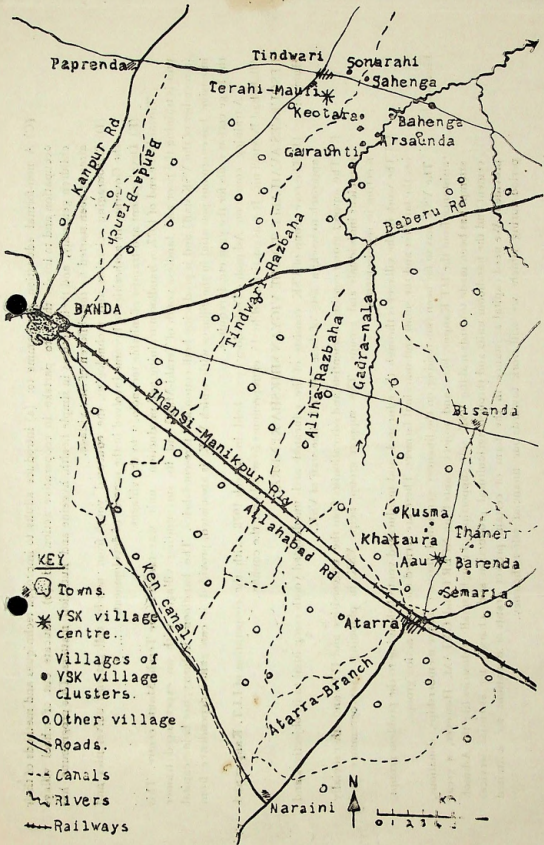
- (C) A non-formal education programme to: (a) introduce adults to improved techniques and methods of their occupation and to inspire them to partake in cooperative action and (b) educate out of school village children generally, and their mothers in simple health, hygiene and nutrition matters. This programme has already been started for the children of Aau village.
- (D) Encouraging scientists and technologists, the educated youth from nearby colleges and universities and the Government authorities to become involved in the process of development.
- (E) Development and transfer of suitable technology to the villages.

Towards the end of 1977, a handloom training and production unit was started in the Terahi-Maufi centre. This unit is training the poor and landless youth of Terahi-Maufi and its surrounding villages with an experienced trainer (a member of the VSK staff) and is producing both cotton and tere-cot fabrics. The handloom industry, not being capital intensive has enormous potential in the villages with which VSK is associated, provided it can gain independence from the large cotton mills for the yarn etc. it requires.

A training course on Ashmoh - Technology was held in March 1978 with the cooperation of I.I.T. Kanpur and Allahabad Polytechnic. It was participated by 15 entrepreneurs from all over the country.

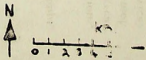
RESOURCES AVAILABLE TO THE VIGYAN SHIKSHA KENDRA:

- Human:
- [1] The core group of VSK consists of the educated and uneducated youth committed to its objectives and approach to work; a few of these are full time staff of VSK.
 - [2] The support group consists of scientists and educationists from the universities and IIT's and other socially conscious individuals and groups. The support group helps VSK in planning its programmes and meeting its requirements.
 - [3] The work in the villages is through the educated and uneducated youth belonging to the problem groups, i.e. the landless and the small and marginal farmers. These are termed the local action groups.
- Financial:
- The VSK has so far been functioning on the finances generated through active memberships, donations, assistance from the IIT Kanpur, loans and project grants from NCERT and OXFAM. However, a great attempt has been made towards making VSK self supporting through small industries like the Ashmoh cement, and the handloom units, and through agricultural production and charges for essential services provided. We need capital assistance in the form of certain project grants or donations for a limited period during which we will work towards our financial self-sufficiency.



KEY

- Towns.
- * YSK village centre.
- Villages of YSK village clusters.
- Other village.
- == Roads.
- - - Canals
- ~ Rivers
- +— Railways



विज्ञान शिक्षा केन्द्र
(Science Education Centre)

(सोसाइटीज रजिस्ट्रेशन ऐक्ट २१, १८६० के अन्तर्गत पंजीकृत)

पंजीकरण सं० १५८२(१६७३-७४)

स्मृति-पत्र एवं नियमावली

(संशोधित)

कार्यालय

अतर्रा (बांदा) उत्तर प्रदेश २१०२०१

संख्या ५२४३
आई-३१०२६

लखनऊ, दिनांक २६-९-१९७३

सील

समितियों के निबन्धन
का
प्रमाण-पत्र

ऐक्ट संख्या २१, १८६० ई०

संख्या १४८२-१९७३-१९७४

मैं एतद् द्वारा प्रमाणित करता हूँ कि " विज्ञान शिक्षा केन्द्र " " Science Education Centre " अतर्रा, बाँदा (उत्तर प्रदेश) नामक समिति का निबन्धन (Registration) सोसाइटीज रजिस्ट्रेशन ऐक्ट संख्या २१, १८६० ई० के अधीन आज के दिवस सम्पन्न हुआ है।

आज दिनांक २४ सितम्बर १९७३ को लखनऊ में मेरे हस्ताक्षर से दिया गया।

निबन्धन शुल्क केवल ५० रुपये।

हस्ताक्षर (व० सिन्हा)
समितियों के निबन्धक
उत्तर प्रदेश, लखनऊ

स्मृति-पत्र

संस्था का नाम : विज्ञान शिक्षा केन्द्र (संक्षेप में 'केन्द्र')
अंग्रेजी में : Science Education Centre or 'Centre'

स्थान : अतर्रा (बांदा) उत्तर प्रदेश

संस्था का उद्देश्य : 1. ग्रामीण क्षेत्र में विज्ञान को लोकप्रिय बनाने के लिये विज्ञान-अध्ययनमण्डलों की स्थापना, विद्यालयों में विज्ञान शिक्षण की विधि में अपेक्षित सुधार।

2. युवकों को आत्मनिर्भर बनाने के लिये उपयोगी औद्योगिक प्रशिक्षण, स्थानीय साधनों एवं आवश्यकता के अनुरूप लघु अथवा कुटीर उद्योगों की स्थापना में उन्हें समुचित सहयोग।

3. ग्रामीण क्षेत्र की सामाजिक एवं आर्थिक प्रगति के हेतु, सामान्य शिक्षा, स्वास्थ्य रक्षा तथा कृषि आदि क्षेत्रों में आवश्यक प्रसार सेवा कार्य।

कार्यालय : अतर्रा (बांदा) उत्तर प्रदेश

कार्यक्षेत्र : प्रदेश के विच्छेद ग्रामीण क्षेत्रों में जहाँ उपयुक्त वातावरण तथा स्थानीय सुविधायें प्राप्त होंगी, केन्द्र कार्यशील होगा।

प्रथम कार्यक्षेत्र : बांदा जनपद

उपरोक्त उद्देश्यों को पूर्ति के लिये 'कार्यकारिणी समिति' के सदस्यों के नाम तथा पूरे पते (व्यवसाय सहित), जिनको केन्द्र के नियमानुसार वर्तमान कार्यभार सौंपा गया है, निम्नांकित हैं :

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नियमावली

संस्था का नाम : विज्ञान शिक्षा केन्द्र (संक्षेप में 'केन्द्र')
 अंग्रेजी में : Science Education Centre
 or 'Centre'

स्थान : अतर्रा (वांदा) उ० प्र०

केन्द्र की सदस्यतायें :

1. सक्रिय सदस्यता : विज्ञान शिक्षा तथा ग्रामीण क्षेत्रों में सामाजिक विकास कार्यों में रुचि रखने वाले तथा किसी भी रूप में केन्द्र के प्रयासों में सक्रिय सहयोग देने वाले व्यक्ति केन्द्र के 'सक्रिय सदस्य' बन सकते हैं। प्रत्येक सक्रिय सदस्य को केन्द्र के लिये सहयोग रूप में २५ रुपये वार्षिक देने होंगे। * एक बार में ५०० रुपये देकर केन्द्र का स्थायी सक्रिय सदस्य बना जा सकता है। स्थायी सक्रिय सदस्यों को वार्षिक सहयोग (२५ रुपये) नहीं देने होंगे।

2. आमंत्रित सदस्यता : ऐसे व्यक्ति जो अपनी स्थिति, योग्यता, अनुभव तथा सहयोग द्वारा केन्द्र के विकास एवं मार्ग दर्शन में सहायक हो सकते हैं, सीमित संख्या में (१० से २० तक) संस्था के आमंत्रित सदस्य मनोनीत किये जायेंगे। * आम सभा में सभी सक्रिय सदस्यों की सम्मति से ऐसे महानुभावों के नाम निश्चित किये जायेंगे तत्पश्चात् सम्बंधित व्यक्ति की सहमति पाने के पश्चात् ही उन्हें आमंत्रित सदस्य माना जायेगा। आमंत्रित सदस्य वर्ष में एक बार आमसभा में आकर अथवा पत्र-व्यवहार द्वारा केन्द्र की गतिविधियों से पूर्णतः अवगत होते रहेंगे तथा अपेक्षित सम्मति प्रदान करते रहेंगे।

* दिनांक १३-७-७५ को विज्ञान शिक्षा केन्द्र की आम सभा की बैठक में पारित प्रस्ताव सं० ४ के आधार पर सक्रिय सदस्यता के अर्न्तगत "प्रत्येक सक्रिय सदस्य केन्द्र के सिद्धांतों तथा लक्ष्यों की ओर आकृष्ट कर प्रतिवर्ष कम से कम एक अतिरिक्त सदस्य बनायेगा" वाक्य तथा 'आमंत्रित सदस्यता' के अर्न्तगत दूसरे वाक्य के आरंभ से "प्रथम" शब्द हटा दिये गये हैं।

3. साधारण सदस्यता : * विद्यार्थियों एवं अध्यापकों के लिये विशेष साधारण सदस्यता क्रमशः रु० ५-०० एवं १०-०० वार्षिक शुल्क पर होगी जिसे प्राप्त धन का उपयोग विज्ञान तथा शिक्षा के क्षेत्र में एक लोकप्रिय पत्रिका प्रकाशित करने में किया जायेगा ।

कार्यकारिणी तथा उसके कार्य :

सक्रियसदस्य सर्वसम्मति से संरक्षक का चुनाव करेंगे। संरक्षक सक्रिय सदस्यों में से कोषाध्यक्ष तथा संयोजक नियुक्त करेगा। ये तीनों मिल कर आमंत्रित सदस्यों में से किसी प्रमुख वैज्ञानिक एवं शिक्षाशास्त्री को (सम्बंधित महानुभाव की सहमति पर) "मुख्य परामर्शदाता" नियुक्त करेंगे तथा सक्रिय सदस्यों में से पांच और सदस्य चुनेंगे—इस प्रकार कुल ६ व्यक्तियों की यह समिति "कार्यकारिणी" नाम से जानी जायेगी जिसका कार्यकाल ५ वर्ष होगा तत्पश्चात् यह पुनर्निर्वाचित की जा सकेगी ।

"कार्यकारिणी" केन्द्र की उद्देश्य पूर्ति हेतु सम्पूर्ण व्यवस्था तथा कार्य प्रणाली की योजना बनायेगी। वर्ष में कम से कम तीन बैठकें कर प्रगति का मूल्यांकन एवं अपेक्षित दिशा निर्देश करेगी। केन्द्र में लगे सक्रिय कार्यकर्ताओं के हेतु आचार संहिता तथा वेतन मान आदि निश्चित करेगी। केन्द्र के हित में सभी अन्तिम निर्णय लेगी।

कार्यकारिणी के पदाधिकारियों के कर्तव्य एवं अधिकार :

मुख्य परामर्शदाता : केन्द्र की विकास योजनाओं में कार्यकारिणी को पूरी तरह परामर्श एवं निर्देश देना। अपेक्षित साधन जुटाने में केन्द्र की सहायता करना।

संरक्षक : आम सभा तथा कार्यकारिणी की बैठकों की अध्यक्षता करना। कार्यकारिणी के निर्णयानुसार संयोजक को आवश्यक सलाह तथा उचित निर्देश देना।

कोषाध्यक्ष : वित्तीय मामलों में कार्यकारिणी को सलाह देना, संयोजक के साथ केन्द्र के नाम प्रमाणित बैंक में खाता खोलना तथा आय/व्यय पर पूरी तरह देखरेख।

* २४-२-७५ को आयोजित कार्यकारिणी की बैठक में पारित प्रस्ताव के आधार पर लिया निर्णय।

संयोजक :

केन्द्र की उद्देश्य पूर्ति हेतु कार्यकारिणी की सम्मति से संपूर्ण आवश्यक कार्यवाही; कार्यालय तथा व्यवस्था का सारा प्रबंध करना तथा वार्षिक आय-व्यय का विवरण रखना, कोषाध्यक्ष के नाम किसी प्रमाणित बैंक में खाता खोलना। केन्द्र की ओर से संपूर्ण पत्र-व्यवहार करना।

कार्यकर्त्ताओं को आर्थिक सहयोग :

सक्रिय सेवा में लगे कार्यकर्त्ताओं को केन्द्र सुविधानुसार यथा संभव आर्थिक सहयोग देगा। वेतन पान निश्चित करने उसे घटाने बढ़ाने अदि का पूरा अधिकार कार्यकारिणी को होगा।

सदस्यों का प्रथक्करण तथा रिक्त पूर्ति :

कोई भी सदस्य जो केन्द्र की औपचारिकतायें पूर्ण नहीं करेगा, कार्य में रुचि नहीं लेगा, केन्द्र को नैतिक या आर्थिक हानि पहुंचायेगा अथवा स्वेच्छा से अलग होना चाहेगा, कार्यकारिणी उसकी सदस्यता समाप्त कर देगी जिसकी पुष्टि आमसभा में होगी।

'कार्यकारिणी' में रिक्त पूर्ति आवश्यकतानुसार आमसभा में की जा सकेगी।

नियमों में संशोधन, परिवर्धन तथा परिवर्तन :

१ केन्द्र के नियमों में संशोधन या परिवर्तन कार्यकारिणी की सम्मति से आमसभा में किया जा सकेगा।

२ व्यवस्था सम्बंधी नियमों में परिवर्धन अथवा उपनियमों के सृजन का अधिकार 'कार्यकारिणी' को होगा जो आम सभा में पुष्ट कराया जा सकेगा।

वैठकों की सूचना :

आमसभा वर्ष में एक बार, 'कार्यकारिणी' वर्ष में कम से कम तीन बैठकें करेगी।

आमसभा की बैठक के लिये दो माह पूर्व तथा कार्यकारिणी की बैठक के लिये १५ दिन पूर्व सूचना दी जायेगी।

कोई विशेष बैठक २४ घण्टे की पूर्व सूचना पर भी बुलाई जा सकेगी।

बंधानिक कार्यवाही :

बंधानिक कार्यवाहियों के लिये संबोजक केन्द्र का प्रतिनिधित्व करेगा। किसी विशेष परिस्थिति में कार्यकारिणी किसी भी सदस्य को प्रतिनिधि घोषित कर सकेगी।

केन्द्र की समाप्ति की दशा पर सम्पत्ति का हस्तांतरण :*

विज्ञान शिक्षा केन्द्र की प्रभावहीन दशा में उसके सक्रिय सदस्यों में से कम से कम ३/५ (तीन बटे पांच) सदस्य केन्द्र की समाप्ति का निर्णय ले सकते हैं। केन्द्र की समाप्ति पर इसके द्वारा सम्पूर्ण अर्जित सम्पत्ति में से आवश्यक व्यय तथा ऋणों आदि का भुगतान कर शेष को केन्द्र के सक्रिय सदस्यों में वितरित तहई किया जायेगा अपितु समान उद्देश्यों वाली किसी भी रजिस्टर्ड संस्था को हस्तांतरित कर दिया जायेगा। ऐसी संस्था का निश्चय भी केन्द्र के तीन बटे पांच सदस्य ही अपनी उत्ती अन्तिम बैठक में कर सकेंगे जिसमें उन्होंने 'विज्ञान शिक्षा केन्द्र' को समाप्त करने का निर्णय लिया हो।

संस्था की बैठकों के लिये आवश्यक कोरम :**

१ विज्ञान शिक्षा केन्द्र से सम्बंधित सभी सामान्य बैठकों में कुल सदस्यों की एक तिहाई (१/३) उपस्थिति बैठक को सम्पन्न करने के लिये पर्याप्त होगी।

२ उपरोक्त नियम के अनुसार 'कोरम' के अभाव में आवश्यक निर्णय न हो पाने की स्थिति में यथा शीघ्र दूसरी वार बैठक बुला कर उपस्थित सदस्यों के मध्य ही समुचित निर्णय लिया जा सकता है।

दिनांक

सत्य प्रतिलिपि

हस्ताक्षर

*दिनांक १३-७-७५ को विज्ञान शिक्षा केन्द्र की आमसभा की बैठक में पारित प्रस्ताव ३ के आधार पर कृत निश्चय।

**दिनांक १०-१२-७६ को विज्ञान शिक्षा केन्द्र की आम सभा की बैठक में पारित प्रस्ताव सं० २ के आधार पर कृत निश्चय।

गांव-गाथा

ग्रामीण युवा संगठन की बुलेटिन

७

नई १९८०

साथियों से

बहुत सारे कारणों से प्रगस्त १७८ के बाद गांव-गाथा बुलेटिन प्रकाशित न हो सकी-इस बीच गत वर्ष (१९७८-७९) चितला क्षेत्र में बाढ़ राहत तथा संगठन कार्यों में ग्रामीण युवा संगठन ने प्रत्यक्ष सक्रिय भूमिका निभाई। अपने अल्पायु में ही हमें काका व्यापक जनसम्पर्क एवं जनसंगठन के अनुभव हुए हैं तथा उन्होंने के आधार पर अब यह अपनी भावी यात्रा के लिए कटिबद्ध है।

गत कुछ दिनों से ग्रामीण युवा संगठन के सदस्य बांदा जिले के कुछ गांवों में सूखे की विभीषिका का अध्ययन करने निकल पड़े हैं उन्होंने के अनुभवों के आधार पर लेखों के माध्यम से हम युवा बुलेटिन फिर प्रकाश में ला रहे हैं। बोशिश यह रहेगी कि यह बुलेटिन अब पुनः अपने साथियों तथा सहयोगियों के बीच अन्वयत पहुँचनी रहे।

अकाल + भ्रष्टाचार = दुभिक्ष

(कराहता हुआ बांदा जिला)

१९७८ की सर्वनाशा बाढ़ की बरबादी से ग्रामीण आधार मित प्रभु ने पाया था कि हमारे जिले के लगभग सभी गांवों को भोगवण सूखे का शिकार होना पड़ा!

प्राकृतिक लेकिन उनसे भी अधिक इसानी कारणों से यह सूखा हमारे जिले तथा पाम के इलाकों में काफी जान लेना सिद्ध हुआ है। योजना पानी के अभाव में जूझती जिन्दगी चुनौती दे रही है और जिन्दगी-मौन की लुका-छिपी का खेल चल रहा है। हर विपत्तियों की तरह सूखे ने भी गांव के गरीबों को ही अपनी मार का निशाना बनाया है-वह अपनी जीवन रक्षा के लिए चित्तचलाती हुए तथा भराती लू में भी काम करने की मजबूर है। वैसे गांव में जायद ही कोई ऐसा हो जिसे इस बार अहलहादी खेतों तथा भरे हुए खलिहानों की ललक संजोने का अवसर मिला हो-बरसात में मेघों ने धरती को धीरे देला ही नहीं था, जाड़े में चार बूँद पानी बरसा व हमें छल गए और हम घर का भी गवां बैठे।

खरीफ को फनल लगभग हुई ही नहीं, रबी में मरवा मिट्टी तथा पल्प संलयक दूधूबवेसों के बन दर थोड़े लोगों ने पैदावार कर ला। डीजन, विजलो का अभाव भी इस वर्ष प्रकृति का चुनौती दे रहा था! अखर्वण से अभाव तथा अभाव से अक्रान का यह रास्ता अब दुभिक्ष की ओर मुड़ रहा है। गर्मी आ गई है-भाजन से ज्यादा पानीधोर चारे की समस्या ने परिस्थिति को और विरहाल बना दिया है। हमारे लोक गातों में "परिण रुठिन समझ्या जू" शायद इसी तरह के वर्षों के लिए कहा गया होगा! इस जगतोको का यह शायद दूसरा भोगवण अकाल है! पहले भी जो याद बड़े बूढ़ों में से भी शायद कुछ को ही हो!

सूखे की चपेट-शामन की दिलाई

अप्रस्त और सितम्बर के महीनों में ही अप्रयण ने भविष्य के कठिन समय का संकेत दे दिए थे, तथा भविष्य ग्रामीणों के मनो में 'अकाल' की आशाका होने लगी थी। पर मानव मन प्रति पल आशा में जोरता जा रहा था : शायद कोई बाद बरसे ; यह नहीं तो बड़े फसल फूले पके!

जैसे ही घर का धनाज खतम हुआ, गरीबों के भुण्ड के भुण्ड सरकारी दफतरो में काम की तलाश में गृहार करते निकल पड़े। सितम्बर से ही गांवों में राहत कार्य शुरू हुए, 'काम के बंदेले लाधात्राजना'के अंतर्गत, चुनावकी घोषणा और केन्द्र की काम चलाऊ सरकार, आपसी जूता सात में लगे नेताओं तथा हमेशाकी तरह निर्णयशून्य, आराम तलब नोकरशाही ने साधारण जनके ऊपर अयिष्ट अकाल दानव के नृत्य में बाजदारो तथा भांडों की भूमिका निभाई। देश के महान नेता, देश की महान परम्पराओं को दुहाई देते रहे और रोटी तथा मुह के बीचकी दूरी बढ़ती रही! जिन गावों के लोगों ने दबाव डाला, वहीं काम शुरू हुआ, पर साधन तथा व्यवस्था को देखकर हमें यही लगता रहा कि विश्वयुद्ध तीर-कामान से लड़ा जा रहा है! अबदूबर के माह में जब जिलाधिकारी से मेरी बातचत हुई उनके मस्तिष्क में नती इस परिस्थिति से जूमने का माहोल था, न योजना थी और न तैयारी!

सो गांवों के बीच एक बी. डी. धो., एक ए. डी. धो. (एम. आई.) तथा कुछ ग्राम सेवक, यह था, ब्लाक-स्थिति सामान्य एवं तकनीकी स्टाफ जिसे राहत कार्य को देख-रेख करना था, स्वाभाविक था कि राहतकार्य धीमा हो, तथा कुछ गांवों तक ही सीमित रहे।

भूखे पेट मिट्टी खादनेका काम फिर पन्द्रहदिन से लेकर एक-एक माह तक मजदूरों की प्रतीक्षा, यह भी माहौल केवल कुछ गांवों में जो ब्लाक कार्यालय से निकट हैं या सड़कों के किनारे हैं, तूफान अधिकतम मात्रा में इन्टोरियर में हैं, वहाँ कार्य को व्यवस्था कोन करता ? केवल काम की माँग में न जाने कितने लोगों ने वादा किये हैं तथा जिलाधिकारों से पुष्टार लगायी, जो पहुँच सके उनके लिए काम की व्यवस्था हुई, वह जो पुरा तयारों से नहीं !

केन्द्र में बैठे किसानों को प्रान्तिनिधि सरकार किसानों के गौताना रही तथा नांचे किसान मजदूर पेट की आगमें झोमते रहे, यह थी उन मझानों का कहानी, ऐसा लग रहा था कि यदि यही माहौल रहा तो चुनाव तक हिसा उभरेगी मरता बना न करता ?

नवम्बर के प्रतिम दिनोंमें एक अशुद्धिपूर्ण हुई निगाशा फिर ग्राशा में बदली, भूखे-पेट लोगों ने खाने का भी अनाज खेतों में डाल दिया। खरीक का मारा किसान रबों की कामना में रत हो गया। बाजार में खेखाचष्ट सस्ता हो गया राहत कार्य में प्राने वाले मजदूरों की संख्या घटी ऐमालग कि समय बहुरा है, तूफान गुजर गया है, पर यह छलावा पिद्ध युधा। बस इतका एक हो फावदा हुआ कि जनवरी में इलेक्शन शान्ति पूर्वक सम्पन्न होगए सरकार बदल गयी, प्राणा हुई कि नई सरकार कुछ करेगी।

राहत कार्य - भ्रष्टाचार के नए-नए रूप :

दिसम्बर सेही राहतकार्य के स्वरूप में थोड़ा परिवर्तन हुआ था। भेटों की नियुक्ति कहीं-कहीं हुई थी, पूनि भेटों को जो मजदूरों देना नियत था वह मजदूरों की मजदूरों से कटौती करके ... अतः कई गांवों में लोगों ने भेटों की उपस्थिति स्वोकार नहीं की, पर ग्रधिकर्षण गांवों में भेटों का नियुक्ति हो गयो। इसी समय राहत कार्य को ठीक चलाने के लिए कुछ अन्य कर्मचारियों को व्यवस्था हुई। प रायत से क्रोटो, अस्थापक तथा ग्रामसेवक इन सभी को लक्षितानापने तथा एम. वा. बनाने का प्रशिक्षण दिया गया, कुछ अग्र दैनिक भत्तेपर कार्यकर्ता रखेगए जो डो. डो. क्रो. की रिपोर्ट प्रादि बनाने में मदद कर सकें। अब राहतकार्य के संचालन हेतु एक अशुद्धिपूर्ण टीम थी, बवाला की व्यवस्था थी, पर इसके बाद की जो कहानी है वह गरीबों की आह तथा मजदूरों से खेलने का ब्लाक अधिकारियों, पर्यवेक्षककार्यियों तथा सहायक एवं भेटों का सयुक्त प्रयास है। खतियां कम नापना, हला-हला कर काम देना, हला - हला कर एम वी.

बनाना, मनमानो ड सिग करवाना, इसके बाद भी मनचाही कटौती, कम बाटो से दोलना, कुछ मजदूरों से मिलकर उन्हें ज्यादा देना इसी लिए बहुत से ईमानदार पर मोन मजदूरों के अग्रकार का हनन तथा चिन्तचिन्ताओं धूम में उनसे काम

लेना मजदूरोंको गाली गलाज आदि न जाने कितने उदाहरण दिये जा सकते हैं। सर्वत्र के लिए आप किसी एक गांव के राहत कार्य को देख लें। फरवरी माच तथा अग्रल के अग्रवार, अग्रस के दरम्यान लोगों की कर्षण कथा के बयान हो उसके सचे सूत्र है।

अग्र हमारे देश में भ्रष्टाचार के कितने रूप हो गये है इसका वर्णन आसान नहीं है। जीवनके किसी भी एक पहलु को लेकर देखा जा सकता है। कोई भी सरकारा विभागयदि इससे मुक्त होतो समक्षिये वह भारत (विशेषतः उत्तर-भारत) का शायद अग्र न हो। आदमी को आदमी न समझकर जान बर से भी बदतर दृष्टि से देखना तथा बैसा हो व्योहार अग्र आम बात हो गई है।

यहाँ अनेकितका तथा भ्रष्टाचार इतना क्रूर हो गया है कि भूखे-नने इसान की रोटो कपड़े से आधा तिहाईभाग निकाल लेना या कभो-कभो पूरी की पूरी खींच लेना आम बात हो गयी है। इसे रोज प्रतिक्षर अग्रदेखा किया जा रहा है; जहाँजिसे अग्रसर मिला उसने अग्रनाउल्लू सीधा करालय। पहले वाड और अब भूखे के राहतकार्यों में लगे लोग विशेषतः अधिकारोवगं ने इन वर्षों में खूब जुटाया है और न केवल वे खुद बालक गाँव के अस्थापकों, पचायत सेवकों तथा प्रधानों से भी पूरी तरह साठ - गाठ करके खूब अग्र अना चार किया है। जो गाँव मुख्यालय या सड़क से जितनी दूर है भ्रष्टाचार का तांडवनृथ्य बढ़ उतनी ही मस्ती से खेला गया है।

पानों की प्यास, भोजन की त्रास

अधिकर्षण गाँवों में कुए सूख रहे है या सूख चुके है हरिजनो की वस्ता में ब्लाक द्वारा खुदाये हुये कुए उंचत - गहराई के अभाव में पहल ही सूख चुके थे। जिन कुओं में पाना है वह भी यदि सवर्णों के दाघरे में है तो हरिजनो का पानो को काई आशा नहो हैं। घण्टो खड़े रहनेपर यदि किसी को दया प्रा गई तो पानो डाल देते हैं। कुए पर चढ़ने या इस्तेमाल करने पर हरिजनो को मारा जा सकताहो। लगभग सभी गाँवों के कुओं में कोड़े पड़ गए है इस कारग्य गाँव में बीमारी फैल रहीहो। हैजा तथा पात्रिया जैसे रोग जांरोपर ही जानवरों में भी खुरपका तथा गलाघोट जैसे रोगवृद्धि पर है !

सस्ते गल्ले की दुकानें

अनेको तो सभी जगह खोल दी गई हैं पर वह हर गाँ में न होकर दूर दूर है कोटदारो की शिकायतहै हमारे ऊपर अधिकारियों का भोषण दबाव है, कदम कदम पर पैसे देने पड़तेहैं। अतः ईसादारी चाहते हुए भी हम बेइमाना करने के लिए बाध्य है नही तो भोजन तक के लिए नहो बचतागरीबोंकी बहुधायुध शिकायतहैकि खाद्यान खरीदने के साथ साथ शबकर खरीदने, के लिए भी उन्हे बाध्य किया जाता है ।

वैसे सचने यह है कि 'परीचर' पास इतनी रज्य कतिन हो नहीं कि वह दूसरों में गलत हो सके । तथ्य, बीजने है कि यदि प्रयोज्य पृथ्वीस वसे किताबें भी निक लीं भी काफ़ी लीं भूबल पर जायेगे ।

श्रावण्डिज तथा मोहनाज लोगो के लिए बहुचर्चित शासन व्यवस्था काफ़ी दीर्घपूर्ण है । यदि कौटिल्य के ग्रन्थ ग्रहणलगा उठेला भी है तो उसके लक्षण प्रायः होने में काफ़ी रीत लग जात है और उसका उल्लेख भय हो जाता है । कौटिल्यो की कोई सर्वाटित श्रावण्डिज भी नहीं है श्रतः उसे एक एक कर चुसा जाता है श्रांरफिर वह भा यह प्रक्रिया लोग दारहता है ।

सांख्यनिक विचारण प्रयाली में कौटिल्य बहु श्रादना हो हो सकता है जो ५-१० हजार वर्षों कर सकता है फिर ऐसे श्रादना की गरीबी लख—ईमानदार लोग दाल में मनक से भी क है—भूदृष्ट व्यवस्था में उपयत्ता हो तो, भी कैसे ?

श्राकाल में वैको की भूमिका

इस बर्ष की भाषण पारमिथित में यदि कोई सस्या विस्कुल मान रही है जिसने कोई विषय श्राजना लेकर किसान मजदूर का भला नहीं किया तो वह थं राष्ट्रीयद्वारा वैका जहाँ कहीं भी कुछ फाइनेस किया गया है तो वृ, भी काफ़ी खानीकर, श्रादरो क्षेत्र से दूर की वैक श्रावण्डे जैसे निरधारी श्रादि की किस्मों, कामगरी, की मदद के नाम पर तो संप सूचना है । कुछ व्यक्तियों तथा बहु किसानों के फायदे के लिए न जाने किंतना सांख्यनिक कोष बरतार किया जा रहा है, गरीब तथा मध्यम वर्गीय किसान बर्क की दृष्टि का बाहरे ही खड़े दिखा जाता है उसे वैक कामचारियों के लाने तथा श्रापणवद भी सुनिश्च पड़ते हैं ।

सबसे खेत, भूखे प्यासे लोग पर चुनाप चक्र चालू

गव में श्राविककाण गरीबवसेकी विभाषिका से श्राजणाला हुए है, श्रादना के लिए श्राज पालीशिया जानवरों के लिए भूख चारा, जहाँ एक श्रादर भोपय सम्भला जाती है, जनवरी तथा श्राव मई में चुनाप श्रावण्डिज ने जो से खले थे आ रहे हैं जकरत श्राव सभी बीजा के एक श्रादर दिन—दूतन बड़े आ रहे हैं दूसरी श्रादर प्रजातिलकका नाटक रचकर श्राविसस्य की पीसा चारादा है । लोकतन्त्र की स्थिति तो यह है कि राजधानियों को छोड़ कर गरीब जनगण श्रादर, तथा गरीबों के स्थानीय चुनाप न जाने किंतने बर्षों से नहीं हुए । भूमि सुधार कानूनो की खुले—श्रापण प्रवहेलता शैरही है । सप्लाई का कुछ हदधो में समर्थ शैरदा है गरीबों की स्थिति दिन प्रतिदिन खराब होतो जा रही है पर हमारी लोक मिय (२) सरकारने उसी 'लोकतन्त्र, तथा गरीबों की दुहाई देकर चुसाँ से निपकी हुई है ।

एक ही रास्ता :

श्राविसस्य गरीब श्रादि—नाहि कर रही, हु श्राविसस्य शासनतन्त्रलिखा उनके सहयोगी श्रादनी प्रकर्मण्डल के बावबुद विचारिता भर रहे हीलो क्या हो सकता है श्रादर क्या किया जा सकता है ?

उत्तर एक ही निकलता है कि 'परीचो का सर्वाटित होनाहोगा तथा श्रावने श्राविकारी की जनदेसत मिला करनी होगी चाहे उसके लिए उभे शासनतन्त्र की नाराजगो का सामना करना पड़े (जिसके की लड़ो गोलो के रूप में) श्रादर श्रावितानुद्धक खेल भरता पड़े । गरीबों का बंटार रहना उनके लिए प्राण घाती है—भूखी मरने सेप्रबन्धहै श्राविकारी के लिए लड़कर मरा श्राय । मरना तो है ही पर उसके पहले कुछ कराय जाय ।

भारतःतु प्रकाश

संयोजक

जीप रुकी नहीं कि सम स्यापुं ही सभ स्यापे खड़ी होगी

श्राविकताक मह श्राकाल के एक दिन श्रावम के समय विन्दवनांग की श्राद से पूल उड़ती एक जीप फरडि से श्राई श्रादर (रही—नाफो) गाँव के पूब की तरफ स्थित बड़े तालाब के दक्षिणी छोर की श्रादर रुक गई (हिरजन बस्तीके पास) पास में खड़े एक श्राविक से एक सजजन जीपजो में बड़े ब श्राविकताक पूछ बैठे श्राविसः इस गाँवमें कुपुं तो सुखे रही है उसा श्राविको म्हावने में गहरे में जवाब दिया (हिरजन बस्ती की दूरगुपुं) एक बचारी का दूसरा श्राविकारी) सूख गय है—तना, सुनते ही पूछने वाले सजजन भल्लारो—साय में बड़े त्रिकाल श्राविकारी मोहोपय से कहने लगे श्राय तो कररहे शो कि इस गाँवमें पानी की कोई समस्या नहीं है जाहयें दोनों कुपो से पानी भरकर लोटे में लाहेंगे । बेचारे शो, शो, शो, क्या करते खुपे में पानी होता तो लाने—जीप में बड़े श्राविकताक महीय कुमपुससो जीप खड़ी हुई नहीं कि समसयापुं खडो हो जाते । बेचारे दी.भी. श्री. जुप ये बरसत में उअरनेयद पला लगाने की कोशिया हो नहीं की थीकि गाँवकी क्या समस्याये हैं । उन दोनों कुपो में से एक कुपुं में (बमारो वाली) कई मई पहले बचारी ने नेहरेत करके कुमुको साफ कियाथा व ब्लाक में उसे बचाने के लिए प्रायंतन पत्र दिया था पररनु भला ब्लाक वचने की गरीबोंके दुख से क्या मतलब?गहिल पला बलाथा कि कुपो की बोरिया होना है श्राव दान बलता है कि केवल मरामत— श्राविकताक मह बलगाव कानूनेहोगा जवाफि कोई मरामयोग्य या सर्वय करेगा— कारण सरकारी तत्र बहुरंग गां है । जिसका उबलत उदाहरणो जीप में बड़े श्राविकताक कुमुपुसा हटसे श्रावित होता है ऐसेकलते उदाहरणहोने भगवान गाँव ।

सुन्दरनाथ

श्राविकीय युवा संयोजक

माम नेरही माफो

'कैसे' से साभार

अखूत शव का वयान

[यह कविता नौजवान पुरुषोत्तम दास के जीवन और उसको मृत्यु का शब्द चित्र है । यह प्रतिभाशाली नौजवान श्रीराम कालेज आफ कामस का छात्र था । या वह दलितवर्ग का, लेकिन प्रचुर प्रतिभा में वह औरों से आगे था । कालेज के तरण ताल में जब उसको लाश मिली तो कालेज के प्रिंसिपल तक ने , उसके अपने सहयोगियों ने भी, पहचानने से इंकार कर दिया । एक लावारिस लाश अस्पताल में पड़ी रही जब तक परिवार वालों ने शिनास्त नहीं की । "अखूत शव का वयान" पुरुषोत्तम की वाणी में उसकी और ऐसे हजारों दूसरे दलित नौजवानों की भावनाओं की अभिलाषा है जो वर्ग-जाति सम्पन्नता के घेरे में वधे समाज के जानलेवा डाटावरण में दम तोड़ देती है ।]

बाहर सड़क पर पड़ी है मेरो लाश,

मावारा लावरिस सो —

जिसके इर्द-गिर्द मड़राते हैं चोल कोए

करतल ध्वनि करत है सियार

और भौंकते हैं कुत्त ।

तब मैं सोचता हूँ कि

कितना मुश्किल होता है

जब शाकाहारिता का लबादा छोड़ कर

अभिनय करने वाले

अपने व स्तविक रूप में आ जाते हैं ।

फिर वे मनुष्य भक्षण व नर लहू की

मदिरा समझ

अपनी विलासिता को तुमि के लिए

घुस जाते हैं उन गलियों में—

जिन्हें शायद आगरा या जेलछो कहते होंगे ।

अब उन अमानवोय घटनाओं का रंगमंच

बन जाते हैं तीर्थ स्थान

जिसके दर्शन कर प्रत्येक नेता

अपने आपको अहोभाग्य समझता है ।

इन सबसे डरकर

मैं अखि भूदकर

भागता हूँ उस निर्जीव सड़क पर

जिसके तारकोल को रोदता, कोधता

करता हूँ अपने से तुलना ।

अखिर सोचता हूँ कि

इतना बलशाली भी नहीं

जो ईंट का जवाब पत्थर से दे सकूँ

और इतना मनहूस भी नहीं

कि मुहू छिपाकर रोता ही रहूँ ।

चक्की के पाटों में

गूँहू कि भाँति पिसता हुआ

करता हूँ संघर्ष की कामना

—स्व० पुरुषोत्तम दास

ग्रामीण युवा संगठन के लिए डा० भारतेन्दु प्रकाश द्वारा प्रकाशित तथा सचकमल प्रेस, अतराई में मुद्रित
सम्पर्क: ग्रामीण युवा संगठन, तेरहोमाफी (तिन्दवारी) बाँदा उ०प्र०

D/H 28/12/81

GREENING THE COUNTRYSIDE

By Ravisharma

Firewood is a feminist issue. When it comes to planting fruit trees, men mainly want fruit trees, not fuel and fodder trees. Voluntary groups in India involved in efforts aimed at organising villagers for afforestation programmes, are finding that success depends on how much they can take into account villagers' interest as a whole, and women's interest in particular. The forest department fails because it is not able to do either

THE firewood crisis is really a feminist issue. Voluntary agencies involved in afforestation efforts in India are learning that it is women and not men who are interested in fuel and fodder trees. The firewood crisis hardly bothers men.

Ecodevelopment camps organised by these groups this year to involve villagers in local afforestation programmes revealed that when villagers were asked 'what trees should we plant?' the men invariably replied 'fruit trees.' The women complained: the men want fruit trees because they want to sell the fruits in the marketplace and buy liquor and tobacco from their proceeds. "What will we do," they asked, and then replied themselves: "Nothing. We want fuel and fodder trees be-

cause it is we who have to walk miles every day to collect them."

The success of afforestation programmes, these agencies find, lies in the extent to which the community can be involved. And this itself depends on how much rural development workers can appreciate the interests of the community, as a whole, and of women in particular.

The Dasholi Gram Swarajya Mandal, which pioneered the famous Chipko (Hug the trees) Movement against deforestation, has been organising community forestry programmes since 1976 in the landslide-affected mountain regions of the Garhwal Himalayas. The New Delhi-based environment cell of the Gandhi Peace Foundation organised two ecodevelopment camps for the first time in 1981 — one in the desert region of Jodhpur and another in the waterlogged areas of Hoshangabad District in Central India.

OPEN DIVISION

These camps were mainly attended by the local villagers. But interested scientists, environmentalists, local officials, college students and opinion leaders were also invited to attend.

It is through these camps that difficulties in providing a green cover on fallow or waste land are

being understood. The first question that comes up is the choice of the species to be planted. Here, repeatedly, all groups find an open division in the interests of women and men, sometimes expressed mildly and at times boldly, depending on the attitudes of the local women. The men in Chamoli were keen on apple trees. In Jodhpur, they demanded 'grafted ber' saplings. The women, however, in both these places have to walk 4-6 kilometres 2-3 times a week to collect fuelwood and fodder and were interested in fuel and fodder species. The Forest Department in Hoshangabad and Chamoli was found to have stocks of saplings useful either for commercial timber or for the men. It was only in Jodhpur that the Desert Afforestation Directorate was able to supply species useful for fuelwood and fodder purposes. The Dasholi Gram Swarajya Mandal has had to establish two nurseries for its requirements, which have helped to plant more than a million trees in the last 5-6 years.

The average survival rate of trees planted by the Forest Department is about 15-30 per cent in the hills and about 30-50 per cent in the plains. The tree plantation camps organised by the Dasholi Gram Swaraj Mandal have resulted in an astonishing 90 per cent survival rate.

The high rate of survival of trees is because of the sense of involvement amongst the villagers generated by the ecodevelopment camps. While planting and rearing trees they know these are for their own use and will also conserve the soil which would improve the fertility of their fields. The farmers in Chamoli built stone walls to safeguard the saplings from animals, while in Hoshangabad and Jodhpur Districts the villagers built tree guards made of stone or dry 'ber' branches.

In the mountains, the participants in the camps formed a line from the stream in the valley to the top of the slope and passed on the water bucket to irrigate the saplings. In Jodhpur, the water was jointly supplied by schoolchildren and the local Station Master. The women took the responsibility of supplying manure for the pits dug to plant the saplings.

"To involve the people, the most important thing is to approach them with an open mind," says Mr. Chand Prasad Bhatt, the pioneer of these ecodevelopment camps. The priority for action has to be decided by the villagers. In Rajasthan, their priority was water, not trees. So the Sucheta Kripalani Shiksha Niketan, the local organisation with which the Gandhi Peace Foundation was working, helped in getting water from the pipeline going to the Jodhpur city. The villagers developed confidence in the volunteers and this led to the ecodevelopment camp, again in which the trees were of the villagers' (partly men's and partly women's) choice.

YIELDS DECLINE

In Hoshangabad, crop yields have been falling because of water-logging, especially during the monsoons. The local group became a link between the Government and the farmers by organising a 'Save the Soil campaign', and the trees planted in the camp were those which can reduce the high groundwater level.

Another local responsibility for the high survival rate of the trees is that all efforts are made to ensure follow-up in the care and protection of the saplings after the camps. For instance, the place where the trees are planted in or near the village is always done in consultation with the villagers to make it most convenient to them.

The newly formed Ecodevelopment Board of the Government of India met for the first time last month to discuss the greening of India. The board concluded that people's participation is very crucial to attain this objective.

Express Magazine

Tehri, a sleepy Himalayan town lying on the banks of the fast-flowing Bhagirathi river, is currently the focal point of a raging controversy over the consequences of an awesome, 260-metre-tall dam, being readied for irrigation and energy. After a recent visit to the lush Bhagirathi valley, DARRYL D'MONTE questions the wisdom of such 'gigantomania'.

Time up for Tehri

"THE best thing that could happen to Tehri is to be submerged, once the dam is built," exclaimed the amply dressed outsider, as we stood on a small promontory overlooking the town on the bank of the fast-flowing Bhagirathi. It was difficult, momentarily, to disagree with him; the hillsides below the nondescript town were strewn with terraces and pits rooted around while children squatted to defecate.

Like most Himalayan towns situated on one of the tributaries of the Ganges, Tehri is filthy—unhappily so. It lies 80 km north of Rishikesh, in a valley surrounded by the Garhwal hills. And is now the focal point of a fierce controversy over the consequences of a high dam to be built two kilometres downstream.

The dam, to be formed with rocks and rubble, will be 260 metres (830 feet) tall, making it the fifth highest of its kind in the world. The multi-purpose project is destined to trap the flood waters of the Bhagirathi as well as a smaller tributary, the Bhilangana—Tehri stands at their confluence—and uses them for irrigation and power.

Work on the scheme began in 1978 and today, the site of the dam presents an awesome spectacle. The steep mountains look ravaged; dirt roads criss-cross the brown slopes, and the air is thick with the frequent blasts of bulldozers, claving their way into the bowels of the earth.

Two tunnels, each being dug on either side of the Bhagirathi to divert the waters being dug will be damped to bank the flow of the river. Already, the tunnelling and the digging on the slopes above have sent tonnes of soft earth cascading down, transforming the river into, what looks from a height, a turbulent, muddy torrent.

Tehri remains a sleepy town and halting place for pilgrims on their way to holy places in the higher reaches of the Him-

alayas; it has a main road cluttered with a motley assortment of shops. Further away, homes ascended a hill, giving way to government offices, presided over by the former Maharaja's palace. This has now been converted into the headquarters for officials working on the dam and is besieged by scores of villagers from the vicinity, anxious to find out how much compensation they will receive, and where they will be shifted, when the dam will flood their land.

Some residents of the town, led by the frail 66-year-old advocate, Yarendra Dutt Saklani, have formed the Tehri Bandh (Dams Virodh) Sangharan Samiti and are fighting what appears to be a losing battle to save the town from being submerged and the people moved to a new site, on top of one of the surrounding hills.

"The work has not progressed too far," Saklani assured me. "The diversion tunnels can be used for bryal purposes." He has largely abandoned his lucrative legal practice and mounted a fierce campaign to lobby everyone he can—from Mrs. Gandhi down—to stop the project. In the last few years, he has made it his life's mission to arm himself with an impressive array of facts about virtually every aspect of the engineering of large dams, and their economic and social consequences.

The greatest of these, according to him, is that Tehri lies in a seismic zone. "Due to the young geological age of the Himalayas, there is a high probability of earthquakes," he says. "This belt of mountains in the past has frequently experienced earthquakes, the epicentre of which lay within a radius of 60 to 160 km from the dam site."

The danger is compounded by the presence of what geologists call faults—the occurrence of fissures in underground rocks. "The opponents of the dam never cease to underline the fact that Tehri project reports had warned that 'the possibility of a kyo-

The lovingly tended paddy fields, in the Bhagirathi valley, soon to be submerged under water.

like danger cannot be ruled out," which was deleted in the revised report. What is certainly a worrying thought is that the pressure of 2.2 billion tonnes of water impounded in the reservoir can trigger off an earthquake. "This reservoir will be 40 per cent bigger than Koyana where an earthquake on December 11, 1957 caused great loss of life and property."

Saklani cites the case of another rock-fill dam, the Teton in Idaho, U.S., which collapsed six years ago. An international commission on large dams found that out of 10,000 such structures, at least 165 were total failures and many many suffered serious accidents.

The project authorities do not share such an alarmist view,

M. K. Singal, the superintending engineer, told me: "Even the Bhakra and Pong dams in the Himalayas are built in more severe seismic zones than Tehri." High storage dams have also been successfully erected in Mangla and Tarbela in Pakistan. Indeed, the 2,240 million cubic metres of water impounded in Tehri will only be a third of Bhakra's capacity (although the former dam is 60 metres higher).

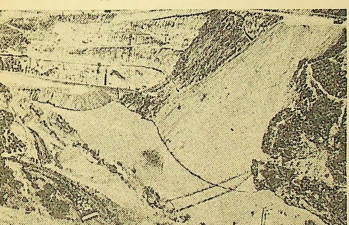
As is inevitable in any such dispute, the National Committee on Environmental Planning and Co-ordination (NCEPC)—now re-constituted as the NCEP—was called in to mediate. In its interim report in May, 1980, it observes that "there is very minor seismic activity as per the Tehri dam site and that distinction of seismic events is near rules a 40 per cent increase in seismic activity because of reservoir filling."

The second major objection to the Tehri project is that the life of the reservoir, estimated at 109 years, may be only 30-40 years, because of the high rate of siltation in rivers like the Bhagirathi (the Gomga silt is said to have the highest siltation rate in the world). Mr. Saklani insists that the Bhakra authorities planned for a sedimentation rate of 105 acre feet per 100 square metres a year, while the actual rate was 154; in the Malwa command in a Damodar valley, the sedimentation rate was 28 acre feet per 100 square metres a year.

S. P. Nayal, former Director General of the Geological Survey of India, has reported that Tehri, "The Bhagirathi and the Gomga rivers in the southern slopes of the snow-covered Himalayas where erosion is extraordinarily active and the rivers bring down the greatest amount of silt and is capable of bringing down 10

times more silt than the flat gradient Sulej" above Bhakra. As any visitor to the stricken town can observe for himself, the mountain slopes above the river are of soft shale landslides are everywhere.

In fact, the surrounding slopes have been so ravaged—thanks to their geological formation itself, excessive blasting with dynamite to build roads and generate felling of trees—that the debris can block the flow of a river in the area and cause flash floods. This is precisely what happened when



Site of the controversial Tehri Dam: "... the pressure of 3.2 billion tonnes of water in the reservoir can trigger off an earthquake"

the Bhagirathi burst its banks in 1978 at Uttarakshi, leaving a desolate trail of destruction which reached all the way down to Tehri; the Alkandana, another snow-fed river, similarly flooded in 1970.

When the Tehri dam is built, it will create a 'backwater' extending 44 km on the Bhagirathi. As another geologist, Dr. C. Prasad, observes, this will raise its level beyond Uttarakshi and increase the chances of landslides.

Tampering with the natural flow of the river will bring about further siltation and thus reduce the life of the reservoir. The NCEPC itself recommends that studies should be conducted in the catchment to find out what the silting levels are.

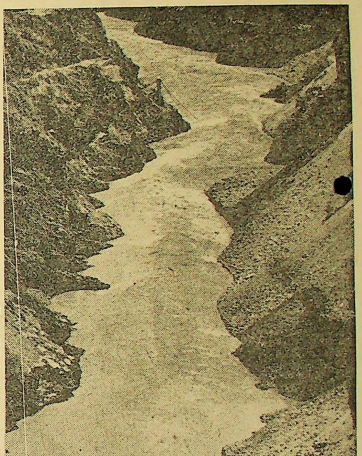
Surprisingly, the actual displacement of Tehri's citizens does not seem to raise much heat, except for members of the Saranathi Samiti like Mr. Saklani, and the secretary, Sardar Prem Singh. There are around 1,200 families in the town—about 1,000 people—and perhaps ten times as many in the 84 surrounding villages, only 22 of which will be completely submerged. As the project's Director of Rehabilitation, S. Paul, explained to me in his office in the former Maharaja's palace, this is because the people have been offered handsome compensation and attractive facilities at the site of the new Tehri town on farm land elsewhere. Those who own

houses in the town will get an ex-gratia payment of up to Rs. 20,000, in addition to compensation calculated by deducting depreciation from present costs of construction. Landowners will be paid up to Rs. 12,000 per acre besides grants for crops and houses.

"Of course, a displacement psychology is bound to persist," admitted Mr. Paul. Both a medical practitioner and geologist, he said: "The town never too attached to Tehri, though they expressed some apprehension about what the future held for their families. Perhaps the biggest loss is of 4,000 hectares of land in the Bhagirathi valley which will be lovingly tended for generations, channelling river water for irrigation. The emerald green of the paddy fields in the valley contrasts sharply with the bleached hillsides."

The human problems caused by the displacement are by no means eased by the blithe pronouncement of officials that several families and gathering fresh data. At a seminar on the dam held by the NCEPC in New Delhi in March this year, speakers from all bodies—state, national or National—He does add, though, that all buildings in the town are three-storey, because of the earthquake hazard."

Like one night, "Tehri, Mr. Saklani outlines what alternatives he advocates in place of the high dam. His role is that of the candlestick—the town is plagued



Harnessing the turbulent waters of the Bhagirathi river

by power failures—as he talks of using the diversion tunnels to generate power and have smaller run-off-the-river hydro schemes instead of the massive dam and reservoir.

The project cost has risen from Rs. 180 crores when it was planned in 1968 to Rs. 830 crores—shortly after work on it began in 1978. At present, construction has only begun on the four tunnels and it is unlikely that the project will be completed by 1979, by which time the cost will have risen still further.

According to Mr. Singal, the engineer in charge, "Run-off schemes aren't an alternative to the dam; they are complementary. Three-quarters of the river's water is discharged during the three summer months, so it is essential to store it for the remaining season."

"In any such scheme, the persons who are beneficiaries live downstream." Nearly 13 million hectares of land will be irrigated as a result and the installed power capacity will be 1,600 MW (incidentally, with the biggest underground generator in the world).

The working group of the NCEPC did not come out against the Tehri dam but suggested several other alternatives, studies and gathering fresh data. At a seminar on the dam held by the NCEPC in New Delhi in March this year, speakers from all bodies—state, national or National—He does add, though, that all buildings in the town are three-storey, because of the earthquake hazard."

These questions haunted me. I accompanied dam engineers in a jeep and on several occasions, up 1,000 feet high on the right bank of the Bhagirathi—Tehri lies on the opposite bank while

the new town will come up a little above, overlooking the reservoir. It was at once an impressive and terrifying sight, only at the actual height of the dam did I realize what a vast area would be buried under tonnes of water.

I also drove in the jeep for a full two minutes into one of the tunnels, anxiously watching the light fade as the mouth of the narrow, deeper into the mountainside. No one can escape feeling a sense of awe when confronted with such a massive engineering feat; yet the river may hit back in ways which cannot be guessed today.

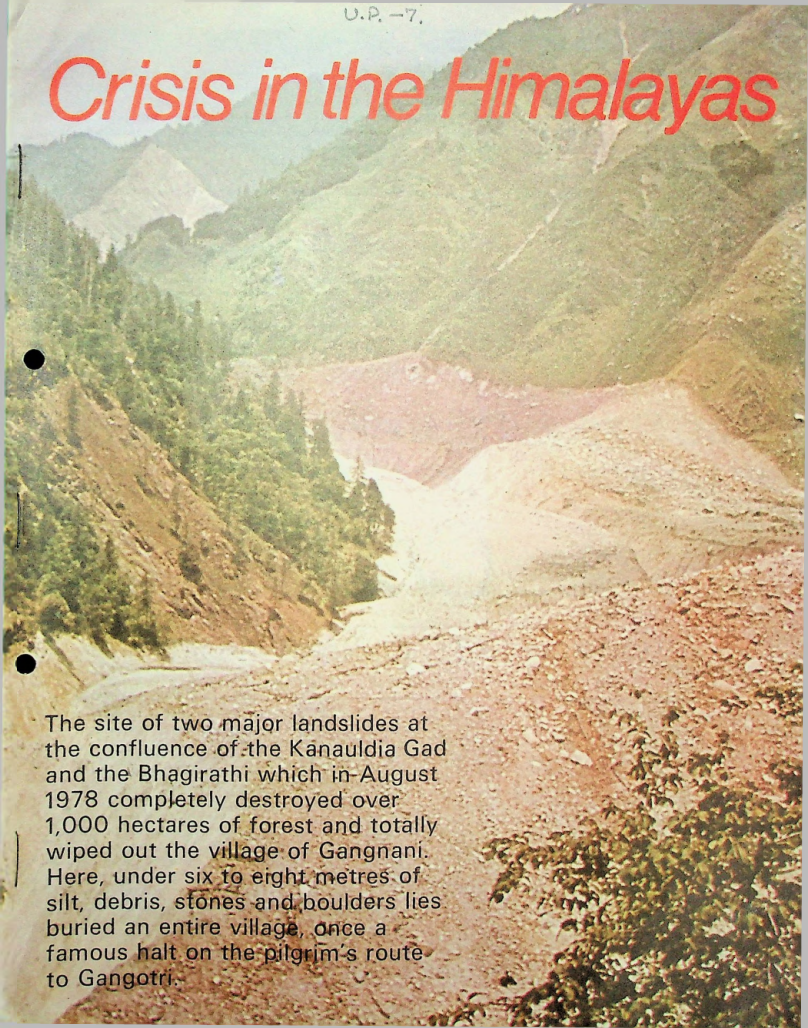
While one can easily get snowed under by the claims and counter-claims over huge projects like the Tehri dam, it is clear that nobody has carefully studied their actual benefits. Given the attention hazards, the possibility of the reservoir having a shorter life-span and the enormous human problems of displacement, the original estimates of the Tehri scheme may prove wildly wrong.

All over the world, scientists are questioning the wisdom of "gigantomania" and wondering whether smaller, more manageable schemes may prove wildly wrong.

All over the world, scientists are questioning the wisdom of "gigantomania" and wondering whether smaller, more manageable schemes may prove wildly wrong. While one can easily get snowed under by the claims and counter-claims over huge projects like the Tehri dam, it is clear that nobody has carefully studied their actual benefits. Given the attention hazards, the possibility of the reservoir having a shorter life-span and the enormous human problems of displacement, the original estimates of the Tehri scheme may prove wildly wrong.

PHOTOS BY DARRYL D'MONTE

Crisis in the Himalayas



The site of two major landslides at the confluence of the Kānauldia Gad and the Bhagirathi which in August 1978 completely destroyed over 1,000 hectares of forest and totally wiped out the village of Gangnani. Here, under six to eight metres of silt, debris, stones and boulders lies buried an entire village, once a famous halt on the pilgrim's route to Gangotri.

1952

'The primary object of the management of forests lying in the catchment areas of important rivers should be to utilise in full the protective influence on soil, the water regime, and the physical and climatic factors of the locality. Further, the interests to be so safeguarded are to outweigh all others which it may be necessary to restrict.'

National Forest Policy of India, 1952

1959

'The Himalayan forests, for instance, are the greatest national assets and to them we owe the richness of the country. The denudation and under-development of the Himalayan slopes lead to a greater intensity and frequency of floods, recurrent erosions, and to cause detritus being deposited in the fertile sub-montane tracts. The process inflicts immeasurable loss and misery on the unsuspecting millions in the Indo-Gangetic plain, and brings about a progressive and permanent impairment of soil fertility, and cumulative reduction in the agricultural potential of the whole land.'

Government of India Report on the Himalayas, 1959

1974

'High mountain eco-systems are unusually prone to sudden, rapid, and irreversible loss of soils if slope stability and vegetation cover are disturbed.'

UNESCO Programme on Man and the Biosphere, Final Report, Paris 1974

1976

'The measurability of what has happened up to now seems to be totally irrelevant with regard to what seems likely to happen in the future if the destruction of the Himalayan environment continues to accelerate.'

Dr Hans Christoph Rieger, 'Floods and Droughts. The Himalayas and the Ganges as an Ecological System', Kathmandu 1976

Two Swedish journalists describe their evaluate the blueprint for survival offered.

Text by Ivo Iliste and
Birgitta Göranson

English Adaptation by James Evetts

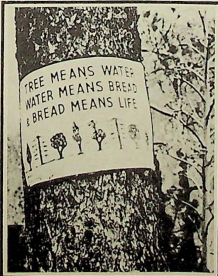
Crisis in the

WATER COMES TO BADIYARGAD

Bureaucratic Cross-connections Destroy a Settlement

Badiyargad is well hidden at the bottom of the valley, four hours bus-ride from Srinagar, Tehri-Garhwal. A restful, quiet place ... on the surface. Badiyargad ought to be proud, that's what the authorities keep saying. They ought to be proud in Badiyargad because they've got such a lot of good things going: a pukka irrigation channel, a new school; buses to Dehra Dun and Rishikesh start here, a new road is being constructed to link the village further with the interior. And then there should have been a lot of work available in the forest also, if only the department and the contractors had been allowed to go ahead with their plans.

Somehow, though, the villagers of Badiyargad are not proud, nor particularly grateful to the authorities involved. Rather



the other way around. The pukka irrigation channel seems to be one of the roots of their resentment.

Roads vs. People

More or less at the same time, some years ago, it was decided that the road was to be continued on the other side of Gayara village and further inland, and that the village was to get an improved irrigation channel from the river bed to the cultivated fields. The Public Works Department said yes to the road and sent out engineers to have a first look. The Ministry of Power and Irrigation said yes to the water channel and sent out surveyors and engineers to have a first look. There was no question as to where to construct the channel — the villagers and PI engineers

1977

'... whether it is profitable to allow cutting for earning revenue of about Rs25 crores annually from the UP hill forests against damage to the tune of Rs250 crores from floods caused by deforestation.'

Union Minister H. N. Bahuguna, November 2, 1977

'The Himalayan Range is the resource-reservoir for the people living on the entire northern plain of India. If the use of this resource-reservoir is not planned, life on the northern plain may be extinct within the foreseeable future.'

B. D. Bhatt, Vice Chancellor of Garhwal University, Srinagar, 1977

1978

'There is a conspiracy of silence between... the UP Government itself... the UP administration and the forest contractors to continue this criminal and traitorous loot of precious natural resources, and deprive future generations of any hope of survival on a sustainable level of existence.'

Sarala Devi's 'Destruction of Himalayan Forests' in *Himachal Times*, September 22, 1978 on the occasion of continued forest auctions in Kotdwara and Narendranagar.

1979

'Usually, uncontrolled deforestation is a symptom of a society's inability to get a grip on other fundamental development problems: agricultural stagnation, grossly unequal land tenure, rising unemployment, rapid population growth, and the incapacity to regulate private enterprise to protect the public interest.'

World Watch Institute, February 1979: *Planting for the Future: Forestry for Human Need*

'Forests are often evaluated by economists in terms of their ability to provide a dead produce — wood.'

Worldwatch Paper No 26, February 1979

recent visit to ravaged Uttarkand and
by the homegrown Chipko movement

Himalayas

Photographs by
Ivo Iljste and
Birgitta Göranson

agreed. But the road was a different matter. The villagers suggested the eastern side of the valley where probable landslids wouldn't affect as many fields and where no village houses were in immediate danger. The PWD engineers thought otherwise. Mainly referring to the geological requirements for the building of a road, they decided to extend it on the western side of the river, just above the main village and the fields.

About one thing though, everybody agreed (when talking about it): if the road was to be constructed just above the fields, then the work on the irrigation channel must be postponed, or else it'd be buried under the debris thrown down by the road gang. Nods and yes's.

Today, when you get off the bus at Badiyargad, you're met by a huge sign-board boasting about the new channel

that has been completed and that will bring even further prosperity and development to this small hill district valley. Ask any villager and they'll readily show you the wonder.

Rain of boulders

Only one season after its completion, the channel is today well buried under masses of stone and rubble, just as was warned some years back. The whole river bed, in fact, is being blocked by the PWD work up on the hill slope. The rain of boulders is steady and makes walking on the paths between the village and the fields a gamble with life.

Oh yes, everybody agreed, when talking about it, that the road had to be constructed first. Letters and memoranda have been written and exchanged. The PWD, it is said, had requested PI to delay.

The PI, it is said, had requested the PWD to hurry up. Or to build somewhere else. But it is, of course, difficult to coordinate between departments, and each section has its itinerary to follow. If you let one tiny village upset the whole plan (which is after all done for the whole district, isn't it?) then where will you end?

The channel was built, and the sign-board put up. It provides statistics in several Annual Reports, adding so-and-so many feet to the irrigation system. And at least one more village in Tehri-Garhwal is covered by the Goals of the Development Plan.

The fact that the channel is completely useless and has only accomplished a colossal waste of money and human resources, that is another matter. And one that is not brought forward in any Annual Reports at all.

COMMENT

There is indeed need for development in the Himalayan region — and there is also sometimes considerable pressure for development — but the eight hill districts of Uttarakhand in Uttar Pradesh are perhaps the most important single area in the whole of India where the disastrous consequences of ignoring the primary need for defining development can be seen and experienced. There are several major and many minor reasons for this situation. The need for development and the pressure for develop-

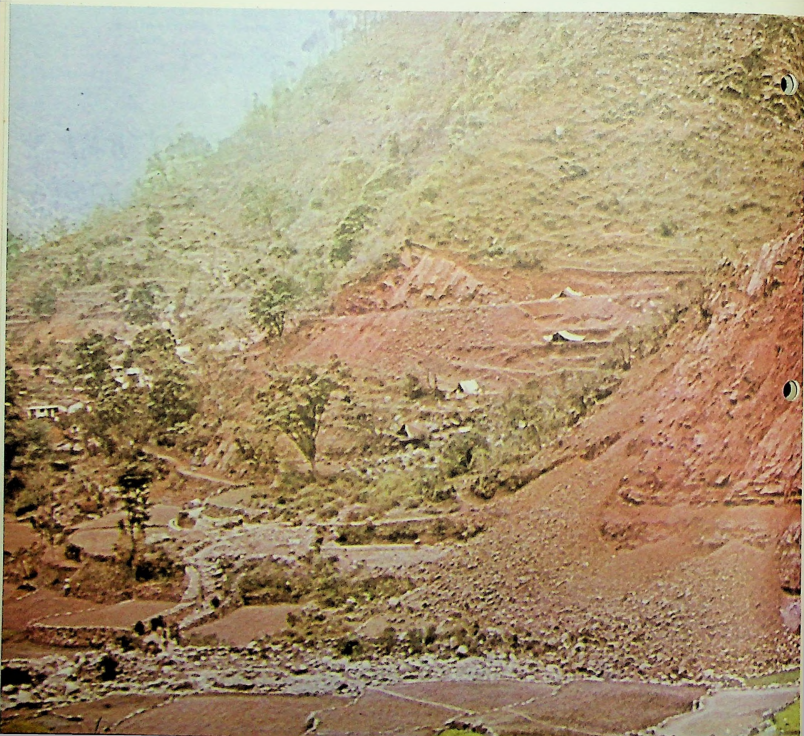
ment obviously seldom originate with the same people. Logically and tragically enough of course, often quite different things are understood by 'development'.

Manipulating Statistics

Juggling around with statistical totals or isolated GNP (Gross National Product) figures is today the most fashionable national and international game for measuring inches and seconds of development and progress. With direct reference to the Himalayas (and what they seem to offer) this means, among other things, mileage of motorable roads, power

output including the pylons for high voltage electricity, mileage of irrigation channels, number of cubic metres of timber 'produced', number of channels for resin tapping. And on the face of it, what on earth could be wrong with more power, better and easier access between people and communities, more water for agriculture? Who can deny the need for all this and more?

The serious trouble begins after we start to exploit and manipulate the basis for this real or imaginary development — natural resources. In many cases, among official and unof-



ficial decision-makers, 'development' and 'progress' do not mean continued cautious use, but careless and, in practice, accelerated exploitation of natural resources. As the collecting of statistics, moreover, is in its turn something of an insatiable game, we start to have seemingly contradictory information. For instance, advanced international technology plays sudden havoc with national pronouncements when satellite photos reveal that instead of an official forest coverage of close to 90% of the ground area, in ecologically crucial districts, it is in fact only about 13% (where it

should be a required minimum of 60%).

If you take up single concrete issues, such as the plan to construct one of the largest dams in India (and the world) in Tehri, where neither state nor central authorities have yet answered very elementary questions relevant to the physical safety of millions of people and the economy and functioning of the whole project; or such as the auctioning of particular forest areas, and follow them up, you soon start to see the underlying common denominators: need, greed and prestige.

Need is the 'obvious' one. But need can be manipulated as a convenient official pretext for very dubious plans and activities. Development and Progress work as a very powerful argument. Who dares to oppose them when there can be no doubt that India needs as much as she can get?

This is also the crucial question which traps so many people, among them civil servants from the UP State and the Central government forest administration. Many are subordinated and have to obey the rules of the game (and consider their careers).



Above A landslide tearing down the slope above the office of the District Magistrate, Tehri.

Left The Badiyargad valley. Boulders and debris from landslides caused by road-construction have completely covered the new irrigation channel and are threatening the cultivated fields.

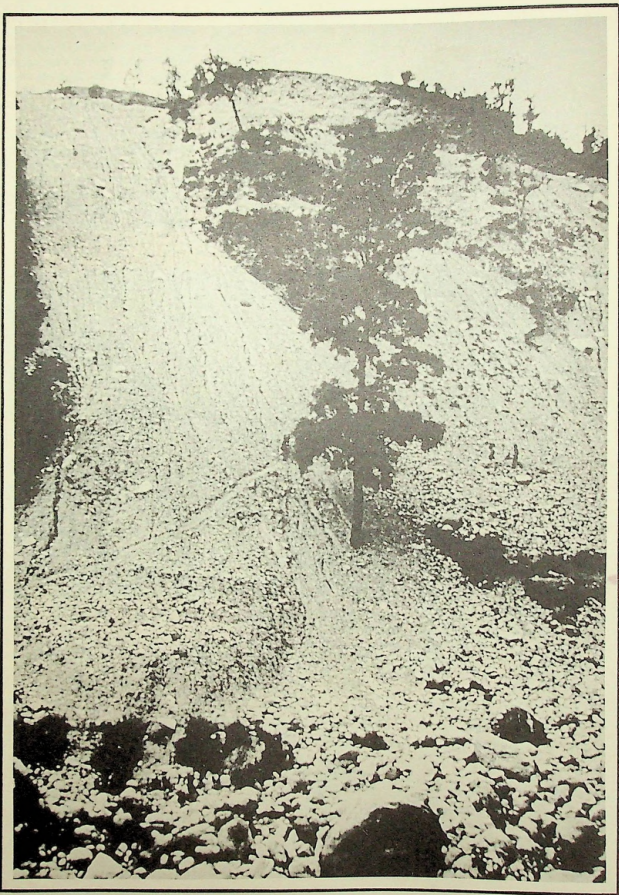
It is all too easy to be branded as an anti-development crank.

Vested Interests

The overall picture, however, becomes much clearer when you look at the economic mechanisms and inner workings of this development. Most current development projects must be carried out by technical contractors who in their turn obviously have strong vested interests in the continuation of such activities, and can also expect considerable pay-offs in the form of contracts. This leaves the door wide open for hidden pressures,

golden handshakes and large-scale corruption with no regard for the possible consequences to the vast majority of the people. Not to speak of ecological considerations, which are both disconcertingly new and at the same time a conception that smacks of primitivism.

This is, of course, not unique to India, nor is it practised only in Uttarakhand, or only by forest contractors. The same mechanism can be seen at work in other professional fields and geographic areas, whether it is power or fertilizer plants, whether in Uttarakhand, Kerala or Maharashtra.



Above The disastrous results of new road construction at Raturi Sera about ten kilometres south of Uttarkashi.

Right In June this year, just before World Environment Day, the women from around Tehri marched through the town with empty water pots on their heads to symbolize the drying up of springs and to demand a secure water supply to the villages.

'SCIENTIFIC FELLING' TAKES ITS TOLL

The hill slope is rather steep and stony, much like all the surrounding slopes as far as we can judge. At this particular spot the forest is dominated by pine — tall, slim chir pine, growing sparsely. Along the stoniest part of the slope a gang of lumberjacks are shaping up logs into squarish sleepers. It's early Sunday morning yet the supervisor keeps shouting at the Nepalese labourers to keep going. 'It's not a holiday, man; don't just stand around and sleep!'

The work here is undertaken by the Forest Corporation — this is said to be the way to avoid the evils of the forest contractors, the way to secure public interest and insight. Strangely enough, it is the former contractor in this area who is today employed by the Corporation as a Mate to do the practical work.

We ask the Assistant Logging Officer from the FC for information:

'Oh yes, forest operations are undertaken by the Corporation, that is our business. Forest operations means cutting. It is all scientific felling, mostly thinning here. The felling was done in January, now they're only processing the sleepers. Everything is going well now that the Corporation is in charge — we do everything ourselves and there are no private interests involved at all any longer. We do absolutely everything ourselves. There will be no forest contractors — we'll hire the labourers ourselves, do everything ourselves. That's why the Corporation was started, wasn't it?'

'How do you manage? Any problems doing everything yourselves?'

'Not at all. We were lucky. This Mate

here, we hired him as our contractor. After all, he's been in the business, he knows the labourers and how to get them. We don't. And since he was out of a job because of this law I told you about, there being no room for private contractors for three years... So he accepted. No problems.'

'You have only been thinning the forest here, you say?'

'Yes, we cut because the trees are too old or they have matured.'

'How old is a pine when it's mature?'

'About 90 years. It takes 90 years to mature.'

'But these trees you've marked, and these that are felled, they cannot be 90 years! They are too thin for that! Why don't we count the year-rings and check? It's not allowed to cut them too young, you know, and not scientific either...'

'Well, I mean, no, perhaps. But they are mature enough to be utilised, that's how I mean. That's why they're cut, I mean, according to my training this is the correct way to do it. We're only thinning to get a good forest — we're only taking away some of the mature trees to make room for the young and strong ones. And nothing grows here anyway. Only pine. It's too stony and rocky. Nothing else could grow.'

'You're not planting anything to compensate for the felling?'

'No. And that's not my department anyhow. Why plant? Nothing grows here, you can see that for yourself, can't you?'

'We've kept walking. We turn around a bend in the path. The slope facing us is a copy of the earlier one. With one big ex-

ception. Terraced fields are neatly clinging on the slope, protected by bunds and stone fences. All along the bunds broad-leaved trees lush into groves. The scene is deep, shady green. Nothing else could grow?'

'Why are forest operations equal to cutting? Apparently it is very possible to grow broad-leaved trees here, trees that would be beneficial both to the people and to the eco-system.'

'The Corporation is only involved in cutting. But the Department works with plantations. Lots of plantations are made.'

'Where? Could we go and see?'

'I know where they are planned, at least.'

'You haven't got a counterpart or some sort of planting division to keep in touch with? Is there no coordination between cutting and planting?'

'I don't know if there is any. I don't know of any. I do my job. I do it according to my training. We all have to do our job, don't we? What would happen if we started to ask all these questions? This is scientific felling and I'm doing my job. Otherwise the forest wealth would be destroyed.'

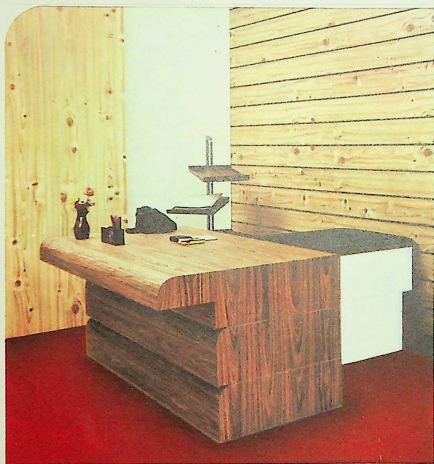
We keep walking. Suddenly we come upon a fresh landslip. Above it trees were felled in January. Sundaral Bahuguna went on a fast on this very spot at the time, warning that such felling must inevitably lead to heavy erosion and landslips. We stop to take a photo.

'Why do you take all these photos of bad things for the Corporation?'

'Bad? Shouldn't you be proud? We're documenting scientific felling, aren't we?'



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COMMENT

When encountering such experiences (the number of incidents could be multiplied from our stay in Uttarakhand), you are forced to ask: Why then is all this happening? Why are we doing this? It shouldn't be possible, you would like to imagine, and that is one of the most infuriating and (on the surface) baffling aspects. This should not be happening. Because the knowledge is there, the information is available. When you do your homework, visit some libraries, read seminar and conference reports and papers, study the files of newspapers, you soon realize that it is neither possible nor necessary to locate or write anything 'new'.

But when you travel on the small mountain buses, often with a double load of passengers, or trek to more remote villages and sites, seeing far below the big ash-coloured silt beaches of the Alaknanda, almost enticing in the oven-heat inside the bus; when you sip your scalding morning tea on the banks of the Bhagirathi and see how the water has cut through the fields, snatching away whole plots that are irretrievably lost, and slicing off parts of others as if a razor had

dismembered them, leaving small and large boulders half hanging in the air, waiting for the next flood to settle them more permanently in the river bed; when you walk along the hill paths and pass random heaps of broken and smashed trees, killed by bleeding them of too much resin, the naked mountain slopes, robbed of protective vegetation and topsoil; when you talk to villagers and see the running noses, rags and bare feet of their children, the women returning under their burdens of fire-wood after long hours of collecting, and the children patiently waiting for a vessel to be filled from the erratic dripping of water down a crack in the mountainside; then you realize (helped by your own parched mouth and hurting feet, the sweat pouring down your aching back) that this suffering — of both man and nature — is not measurable solely in terms of past and present. It is an ongoing process which threatens to become much worse and involve many more people.

And again you are forced to return to the question: Why? Haven't we known, don't we at least know *now* that the Himalayas are ecologically a very sensitive and vulnerable area? That they are the youngest of the big mountains and seismically still quite

unstable? That the mountainsides are easily eroded and the rivers flood-prone? That any action of man may easily lead to irrevocable consequences which will not only affect the local people but directly affect much greater numbers of people living hundreds of miles out of sight of the Himalayas?

Villagers Ignorant?

When you put such questions to officials you are usually answered with a shrug of the shoulders: 'You must realize that the villagers are still very ignorant.' This may be true, but you wonder if it is really true for all villagers, and how much it reflects only the conditioned attitude of the officials. Some villagers are truly ignorant, but many are acutely aware of the situation, and the particular chain of cause and effect. Many are victims of their present circumstances and cannot afford to do otherwise than try to fulfil the physical needs of themselves and their cattle, even if it means still more diminishing resources in the long run (and it is very easy to impose lofty and hypothetical demands on other people from a distance!). But some have taken up the conscious struggle for their environment with various risks for themselves.



Above The road between Tehri and Gansyali. The shoulders of the road are so loose that road gangs have continuously to clear away debris from the almost permanent landslips while buses wait their turn on either side of the bend.

HEVALGHATI

Organizing for True Development

Bishan Devi, Pari Devi, Mimi and Sabli all come from villages in Heval Ghati (the valley of Heval). Their villages — Pipealeth and Rampur — cling to steep hillslopes with small cultivated plots like a terraced staircase between the low, brown village houses and the green river far below. The path leading up to Pipealeth is like a warning of what is happening to the forest wealth of the Himalayas; the path up to Rampur tells us how it has been. And how it still ought to be.

Catastrophic Imbalance

The 80 families in Pipealeth are complaining about drying up springs; the slopes above the village are sparsely covered with thin pines; the view across the valley shows grey wounds where the motor road has been built and where the pylons have been erected; landslips are very common these days. Commercial felling coupled with the villagers' own need for forest products have led to a catastrophic imbalance in ecology and economy. When the forest that has protected and bound the thin layer of soil, retained the water, provided firewood, fodder, green manure, fruit and vegetables, when this forest is gone, then the balance of nature is destroyed. And so is the liveli-

THE EFFECTS OF EROSION

The river Kosi in Bihar has moved 115 kms westwards within the last two centuries, leaving 15,000 square kms of once fertile land buried under a mass of sand and pebbles and displacing 6.5 million persons.

Water and wind erosion wash and blow away every year approximately 600 billion tonnes of the soil of India into the sea. The loss of that soil in nutrition value of nitrogen, phosphate and potash is equivalent to 500,000 tonnes of these fertilizers, and the money value is over 700 million rupees, more than the present total production of artificial fertilizer in India during two years.

National Seminar on 'People and Forests' in Delhi, December 1977 (Union Minister H. N. Bahuguna)

hood of the villagers.

Some years ago the villagers started to question what was going on. The village teacher, involved in Sarvodaya and Chipko Andolan, helped them find some of the answers. Why is there no longer water in the springs? Why are the fields becoming barren? Why is the soil washed away? Why is the river silting up? Why are there so many landslides?

Careless Treatment of the Forests

Most of the answers led to a criticism of the forest policy maintained by the Uttar Pradesh Government through the Forest Department and the contractors, and also a criticism of the careless treatment of the forests by the villagers themselves.

Today they have mutually agreed to restrict themselves: less lopping of trees for fodder, careful planting of fodder and fruit trees along fields and slopes — yes, everywhere where it is possible to plant a seedling or a seed.

But they have also started to put demands on the authorities and taken action against the contractors. Two years ago the men demonstrated against excessive resin-tapping. They started a sit-in outside the office of the Forest Department. They were thrown out. The women marched in protest. They were arrested.

Non-violent Resistance

And many of the women from Pipealeth and Rampur have been arrested several times since then because they have made it impossible for the contractors to fell or to tap resin. Today it is not unusual that the axmen are followed by police when they go about their work.

'No, we're not afraid of the police. Why should we worry about the police? We worry about our future!'

Mimi and Pari Devi are firm.

'We can see the devastation all around us. Nobody needs to explain to us that felling in this manner must be stopped, and the tapping also. We understand that; we've seen what is happening. Yes, we are members of Chipko and of course the Andolan is concerned about this. But Chipko hasn't just given us pat answers. Chipko has helped us to get organized, and has supported us so that we were able to answer our own questions.'

The contract for further felling in and around Pipealeth was stopped. The confrontation regarding the resin-tapping is still stalemated: the boy cowherds sabotage the tapping every day by taking away the tin strips and containers that are inserted in the tapping channels. Sometimes they try to bandage the bleeding trees. The contractors put back the strips

and containers.

But there are always more cowherds...

The path leading up to Rampur winds through an area where broad-leaved trees still predominate. They grow in lush groves between the fields, beside murmuring rivulets. Plantains and mango trees grow alongside khadak, ghorial, bhaheda and even pipal, its leaves clattering in the wind. You can even find a few mulberry trees left here in spite of the fact that they are in heavy demand in the plains as raw material for sports goods. Small water tanks are found regularly along the slope. The water is trickling, controlled, from one terrace of fields to the next through elaborate earth channels.

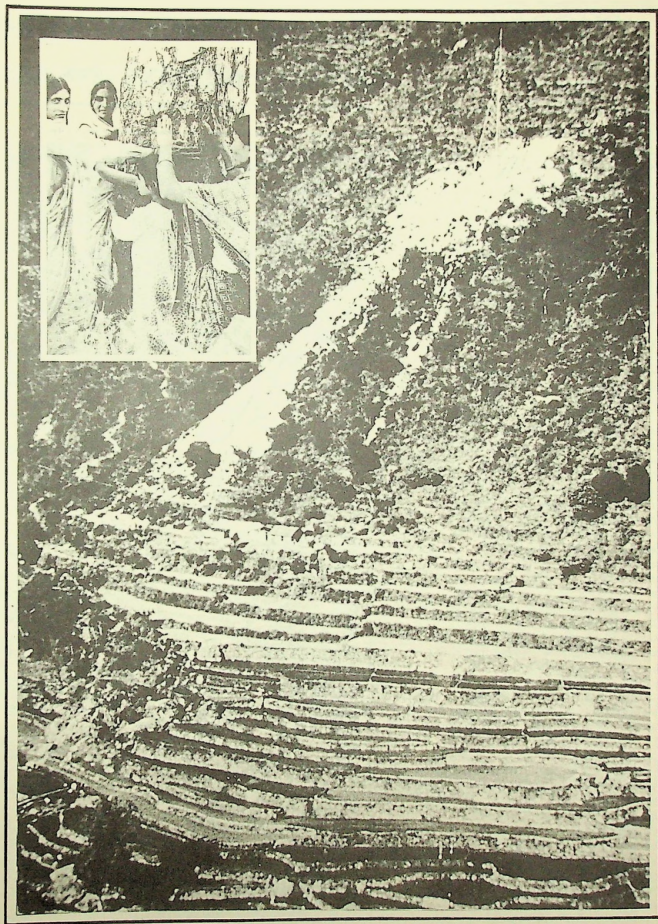
On the other side of the valley the fields of Pipealeth lie dry and barren, waiting for the monsoon. Here in Rampur the forest cover is sufficient to keep a steady water table the year round, and today, at the beginning of June, the paddy has just been transplanted.

'Yes,' agrees Sabli, 'the fellings on our side of the river haven't been as intensive as in other parts, especially not here around Rampur. And today we keep a close watch so that no forest at all will be cut here.'

The women from these villages, and from many others along Heval Ghati, are active in the Chipko Movement. They have regular meetings every second week. They arrange and take part in forest seminars, together with hill people from other parts of the district. They take turns in keeping an eye on each other and other villagers so that new trees are planted, so that the cattle are not taken for grazing on the same pastures every day, so that lopping of fodder trees is not too heavy, so that axmen, resin-collectors and contractors do not cross into prohibited areas. They demand immediate changes in the official forest policy.

The voices of the women have become loud and clear through their environmental activities. Since the men have left for the plains in search of work or are away on construction jobs in other districts, everything that has to do with farming and keeping cattle has been taken care of by the women and children. The women have the experience and knowledge concerning the environment in which they live. And they worry about exploitation. They are willing to stake their own lives to achieve a change.

Heval Ghati is not only clear felled slopes, the wounds of landslides, dried-up springs. Heval Ghati is also practical experience, readiness to act and an alternative for true development.



Above Erosion encouraged by the erection of a single pylon, can destroy a disproportionately large area of land.
Inset While hugging the trees the women chant: 'Himalaya wake up today! Drive the cruel axe away!'

'CHOP ME, NOT THE TREE!'

The People's Answer

Over the past eight years a remarkable environmental consciousness has grown in the Himalayan Districts of Uttar Pradesh. The hill people are getting organized to put an end to the indiscriminate felling of forests. They have evolved an effective, non-violent method of defending the trees: when the axmen approach, the villagers hug the trees, chanting 'Chop me, not the tree!'

Tree as symbol of life

This is the basis of Chipko Andolan, the Tree-Hugging Movement, to protect the trees and the environment. How has this concern for the trees been brought about?

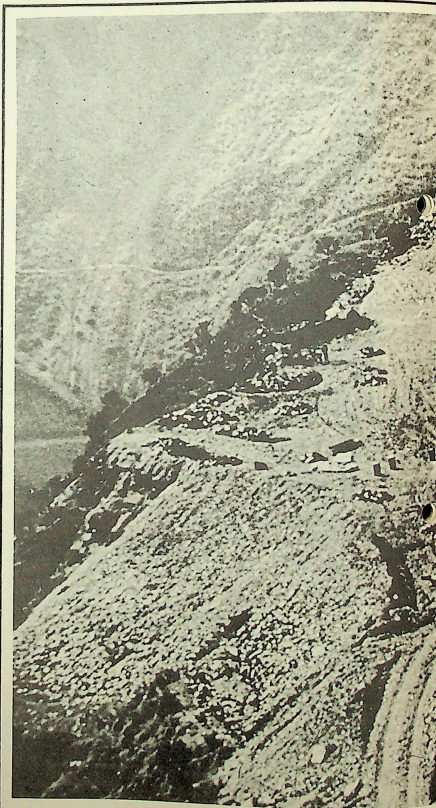
'As long as man has existed, the forests have provided food, shelter and cattlefeed,' says Sundarlal Bahuguna, one of the leaders of the Chipko Movement. 'This created respect for the dependency of man on Nature. In many societies you can find the tree as a symbol of life. The old Indian culture flourished under the trees. This care and balance was destroyed by the so-called modern, industrialized culture, in India represented first by British rule. Under the British, our forests were regarded as a source of trade and profit. The traditional rights of the villagers to make use of the forest were taken away from them and the government took over the commercial exploitation of the forests, disregarding both the needs of the local people and the balance of nature. The village economy was destroyed. Many men had to look for jobs far away from their native place.'

Century-old revolt

'But the villagers didn't always accept the official forest policy. In Uttarakhand this century began with a mass rebellion against the existing methods of forest management. So in a way, Chipko Andolan is only a continuation of a century-old revolt. And the strength of the movement depends on the experience of the people, especially the women: they have lived through the developments in the hills, they know what is happening.'

Yes, the women are the force behind the Andolan. They are experienced,

'Every standing green living sentry to save



A razed hilltop where construction work for the Tehri Dam has already

**tree in the hills is a
the country.'** *Sundarlal Bahuguna*



outspoken, confident. As a symbol of their involvement, the women in Heval valley last year tied their rakhis around trees marked for felling, thereby showing that they regarded these trees as their brothers and would defend them with their lives. The axmen didn't dare touch these trees.

The birth of Chipko

According to Sundarlal Bahuguna, 'The seed of the Chipko Movement was sown when the UP Government auctioned ash trees in the Dasholi area to an Allahabad-based sports manufacturer. He was allowed to fell in the same forest where the villagers had been prevented from cutting on the grounds that it was not advisable from the point of view of scientific forestry. The people reacted strongly. "The trees which we nurture are not available to us but can be sold for the luxury needs of the people in the plains. What science is this?" They decided to protect the trees by clinging to them. That's how Chipko was born.'

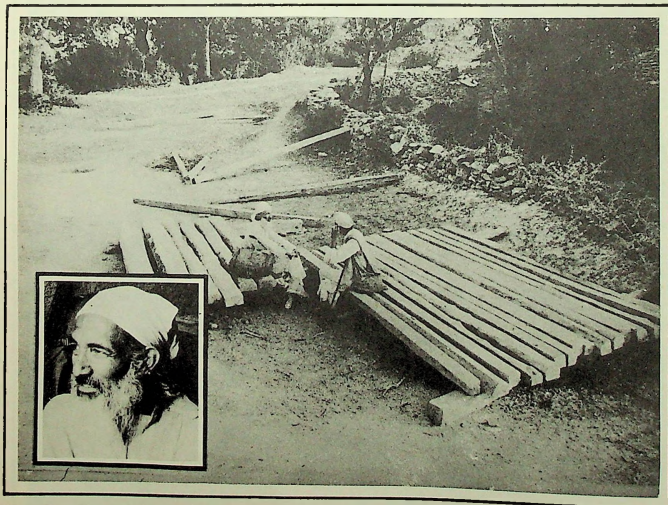
In the beginning Chipko was more or less an economic movement. 'We wanted the contractor system stopped,' says Bahuguna. 'We wanted minimum wages for the villagers as a part of their rights; we wanted labour co-operatives to be set up and we wanted supply of raw materials at concessional rates to local small industries.'

These demands have, to a certain extent, been met by the authorities. The private contractor system is to be abolished, minimum wages are paid (at least where it is possible to check) — Rs7.50 instead of the earlier Rs2.50. But it has proved difficult for various obvious reasons for the genuine labour co-operatives to 'compete' and besides, there is no law stopping the former contractors from reorganizing themselves into co-operatives of their own . . .

Closer contact with world problems

Chipko has undergone a subtle change

especially after the UN Conference on World Environment. Sundarlal Bahuguna and the workers within the movement have come into closer contact with worldwide ecological problems. Says Bahuguna, 'Through friends and information materials we got to know much more about similar problems in other parts of the world. We gained a wider perspective on protection of the environment. In 1973 I made a foot-march through Uttarkhand and I was deeply shocked. After seeing for myself the state of our hills — all the deep wounds from valley to valley, from village to village — I changed my point of view. I came to realize that protection of the environment must be the basis for all economic planning and progress. Had I not seen it for myself I wouldn't have felt so deeply. There must be a ban on the felling of trees. Experts all over the world stress that felling in catchment areas is disastrous. In our so-called scientific forestry only certain areas of the hills are



Above Travelling on foot from village to village in the hills is an effective way to keep in touch with the people and observe the actual condition of the environment. Sundarlal Bahuguna and the other workers in the Chipko Andolan spend most of their time on foot. There is always someone ready to stop and talk along the way. Inset Sundarlal Bahuguna.

considered as catchment areas for our big rivers. I believe that the whole Himalayan region is to be considered as a catchment area. There has to be an immediate ban on green-felling in the entire hill area. But even that is not enough. Planting of trees must be taken up on a war-footing. This is also what the villagers have realised.'

Broad-leaved trees, not commercial forests

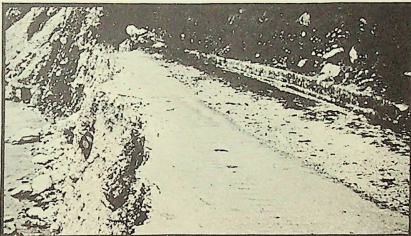
Chipko's blueprint for development in the Himalayan region is based on involvement of the people. Bahuguna feels that 'The needs of the local people must be met first of all, their experience utilized, their voices heard. The Himalayan forest must be protected. Massive planting of new trees would provide much more — and continuous! — work for the villagers than one-time fellings. . . And planting not of commercial trees, but broad-leaved trees providing food, fodder, fuel, fertilizer and fibre. Broad-leaved trees also protect the soil, build it up and keep it moist. The national forest policy must be changed. Not only in words but in practice. All coniferous forests should be developed into mixed forests. Commercial forests have never been able to meet the needs of the people and they have been ruinous to the environment. The top-soil has been washed away after the fellings and then the men were washed away. To bring a change we must base our plans and actions on the people and their needs, on nature and her needs. Our blueprint is not only for the saving of the hills; it's for the survival of mankind. The present government policy is destroying the forest to earn money. Our policy is to make people self-sufficient.'

Sundarlal Bahuguna is well aware that the Chipko Movement is going against the stream, at least against what could be called the powerful established stream. But Chipko Andolan has many sister organizations all over the world — wherever people have experienced the havoc brought about by ruthless exploitation of natural resources. When Chipko activists point out that they want to work for the establishment of a permanent economy based on a changed, balanced relationship between man and earth they are certainly not alone. They are giving voice to experiences known also to the inhabitants of the Amazon basin, to the nomads of Sahel, to the people of Papua New Guinea and Indonesia. Chipko is part of a wider movement that is gathering strength everywhere — the voices of common people demanding justice and sanity. □

CHIPKO — HOW OLD?

348 years ago, on September 12 to be exact, in a village in Jodhpur district, Rajasthan, members of the Vishnoi community, followed the lead of Amrita Devi in laying down their lives to prevent felling of trees in this desert region. Amrita Devi clung to a tree trunk, allowing her body to be hacked to pieces as the workmen of Maharaja Ajit Singh relentlessly brought down their axes on it. The news brought members of the Vishnoi community rushing to the spot from surrounding villages. The Maharaja called a halt to the operation only after 363 of them had laid down their lives. This is perhaps the only example of mass sacrifice in the cause of protecting trees.

HIMALAYA — Man and Nature, Vol 2, No 5, October 1978, p 34.



Above After the Bhagirathi deluge, the old road ends rather abruptly at Raturi Sera.

SOME FACTS AND FORECASTS FROM THE FOOD AND AGRICULTURAL ORGANISATION OF THE UNITED NATIONS

Closed forests (where the tree crowns cover 20% or more of the ground) are disappearing at an estimated 10-20 million hectares per year.

Tropical moist forest is disappearing at a rate of approximately 11 million hectares per year, an area equivalent to the size of Bulgaria or Cuba.

Asia's total new planting (excluding China) during the 1970's has been approximately 1.5 million hectares. Thailand is yearly felling 1/6th of the total new planting of Asia during the entire decade of the 1970's; India has in 25 years cut down more than three times the area of total new planting in Asia in

the 70's.

Erosion, flooding, silting of rivers, reservoirs and harbours on a massive and catastrophic scale because of deforestation, is by now reported from many Asian, African and Latin American countries — India, Indonesia, Nepal, Pakistan, the Philippines, Nigeria, Tanzania, Colombia, Costa Rica, Venezuela and others.

If the present trend continues the forests of Malaysia will be depleted by 1990, the forests of Thailand will have vanished in 25 years time, and all original old-growth forests of Philippines will be cut down by 2000.

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TEHRI DAM :

PROJECT
THAT
SPELLS DISASTER



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FORE-WORD

A freedom fighter Sri Virendra Datt Saklani is a well known personality and a leading lawyer in the Himalayan districts of Tehri Garhwal and Uttarkashi. He was born on 16th Nov. 1916 in Tehri town and it is natural that he should have profound attachment and love for his home town. After passing his B.A. degree he for some time worked as an honorary teacher in English language in Ghananand High School Mussorie, but later on he joined law and passed LL.B. degrees in the first division. In 1942 he joined the bar in Saharanpur judgship at Dehra Dun. He was very closely associated with martyr Sri Deo Suman and was profoundly impressed with his national activities. When the father of the Nation Mahatma Gandhi gave the call for "Quit India" movement, Sri Saklani plunged in the Freedom of India movement. He was the first person to hoist the congress flag in Tehri Town on 10th of Sept, 1942, where upon he was immediately arrested and was lodged in Tehri jail on 12th Set. 1942. During the period of detention he was tortured in many ways. He was forbidden to get clothes to change, not provided to take bath, no facilities for cutting hair or shaving were allowed on account of which long hairs on head and beard grew. Similar treatment was meted out to other detainees, e.g. Sri Bansi Lal Puadir, Kushal

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Singh Rangar, Prem Datt Dobhal, Dinesh Chandra Saklani, Ram Chandra Uniyal and all other who were arrested during the same period Sri Saklani was detained in jail for 390 days, and, but for the last 30 days he was all through kept in solitary confinement and was tortured beyond description. During the winter, the only blanket given to him was taken away inspite of the clothes on his body were in tattered condition, and he was kept in heavy shakles simply to demoralize and torture and he was kept in that horrible position for 24 days.

These very shakles were later put upon Sri Deo Suman who resorted to hunger strike for 84 days and sacrificed his valuable life at the alter of Independence, These shakles are preserved in Tehri jail for public view on Suman day which is a declared holiday Sri Jawahar Lal Nehru, then at a meeting at Srinagar Garhwal proclaimed that the Tehri jail shall always be remembered as a symbol of terrorism for all times to come.

Sri Saklani was released in Oct. 1943 from detention but was kept under house arrest for one year more. After expiry of the period of parole, he joined the Tehri Bar and started practicing law under the guidance of his father Sri Devendra Datt Saklani, who himself was an eminent lawyer.

In the year 1948, movement to free the princely state of Tehri Garhwal from feudalism began,

Sri Saklani together with Sri Shankar Datt Dobhal led the revolution. Both of them were at once arrested, kept for one night in Tehri Police Hawalat, and then together with sixteen other Prajamandal workers were transferred to Police Hawalat Narendra Nagar, where they were detained for 18 days. After his release from detention he and Sri Doval with blessings of late Sardar Patel, again organized the rebellion against the feudal system of Government in most peaceful and non-violent way. The Maharaja was not allowed to enter the Tehri town, and with great tact, the armed forces stationed at Tehri together with the commander of State Military Force Sri Nathu Singh were arrested and disarmed, all the state officials stationed at Tehri were arrested and lodged in Tehri jail. Whole of this movement was surprisingly peaceful except that at Kiatinagar, the state Police resorted to firing in which Sri Nagendra Datt Saklani and Molu Singh Bhardari lost their lives. So, ended the feudal system of Govt. in the princely state of Tehri Garhwal in 1948. A constituent assembly was formed and a popular democratic Govt. installed which functioned till the merger of Tehri Garhwal in Uttar Pradesh.

It is to the credit of Sri Saklani, that inspite of all persuasion and oppurtunities given, he refused to join the Govt. or to accept any post of power and position. He resumed his practice and took part in social and development activities. For a number of years he remained President of the Zila Harijan Sewak

Sangh and General Secretary of Zila Nagrik Parishad During his tenure as President of his Gaon Sabha and Chairman of Tehri Nagar Palika he carried out many works of public welfare and during the China aggression and Bharat Pakistan war his efforts for the help of soldiers at the front were highly appreciated by all concerned. Though entitled to Freedom Fighter's pension, he did not accept it holding that he had only fulfilled his duty towards his motherland and could not accept compensation for it.

Sri Saklani has been in opposition of Tehri dam from the very beginning. Agitation against the Tehri dam was going on under the leadership of Sri Vidya Sagar Nautiyal, but the main emphasis was on rehabilitation of the people to be ousted by the dam. It was sometimes in January 1978 that Sri Saklani and his colleagues came to know of certain facts about the geological, seismological aspects of project area and weak rock formations obtaining at the dam site. It startled them and they were convinced that if this dam is built it is not only going to ruin the hill people but it is bound to fail and result in a catastrophe unprecedented in the history of man. Obviously, if the dam bursts, the 2.62 million acre ft. water released from its 45 Sq. K.M. lake will wipe out all habitations from Munikireti to Calcutta.

It was then that the Tehri Bandh Virodhi Sangharsh Samiti was formed. Sri Saklani being a non-party man was elected its president, and the presidents or Chairmen of all National Political parties (Distt.

Units) were elected, Vice Presidents of the Samiti. Representatives of all the concerned Gram Sabhas and prominent Social workers were elected as member of the Samiti. Many prominent persons were opted as its members and the first resolution to oppose the dam was unanimously passed on 24.1.78.

There after several big demonstrations were held, representation made to the Union and State Govt. which all fell on deaf ears. The vested interests in collaboration with the corrupt bureaucracy prevailed and the Govt. gave a green signal to go ahead with the project which forced the people to offer Satyagrah. When the work allotted to the contractors came to a stand still, the Govt. resorted to force, a large number of armed police force was called in and the Tehri town was virtually turned into a police cantonment. Sri Saklani together with his wife and many others were arrested on 1.6.78 They were released on the next day but Sri Saklani was rearrested the same day together with Sri Sawan Chand Ramola and many other prominent Satyagrahis were also arrested and sent to prison. There after, Sri Govind Singh Negi M.L.A. together with many other persons specially village women were arrested and due to paucity of space in Tehri jail most of them were sent to Bareilly jail. Amongst the arrested persons were Smt. Nisa Rani wife of the President Congress (I) and the elder daughter of Sri Saklani. Smt. Sushila Gairola and thus after putting many persons behind the bar, the tunn-

Cont on last page.

Tehri Dam :

PROJECT THAT SPELLS DISASTER

(V. D. Saklani)

The Tehri Dam has become a project of fierce controversy in recent months, and serious objections have been raised to its construction on geological and ecological, humanitarian and other grounds.

The dam is proposed to be constructed on the Bhagirathi river near Tehri town in mid Himalayas. It is well known that the Tehri dam site lies within isoseismals VII and VIII of Kangra earthquake (1905) and it is subject to an earth quake whose intensity by M. M. scale can be up to VIII and X balls. It has frequently experienced earthquakes of varying magnitudes in the past. A perusal of the report on seismic instrumentation for water resources development projects in Ganga and Yamuna Valley by the Roorkee University scientists goes to show that seismic activity is on the increase in this region in as much as before the year 1971 While one or two earthquakes a year were experienced, at least 5 earthquakes in the year 1974 and 7 earthquakes in the year 1975 were experienced and many earthquakes originating from potential active features along which big earthquakes could occur in future remained undected as the seismological

instrumentation for monitoring the complete earthquake activity was found to be inadequate and not well distributed over the whole region,

The Bhagirathi follows a weathered course and at the dam site weak metamorphic formations occur in the foundations and the river gorge are characterized by their shale structures as well as by their bent for intensive weathering and disintegration into separate blocks. The rock formations are of completely low strength (150-100 kg/cm) with completely low factor of shear resistance of rocks in foundation (0.5-0.6).

Heavy cracking of the rocks have been found on the exterior zone of the slopes of the river gorge. Thus the rocks on which the dam is proposed to be built are highly deformed and are most unlikely to be able to bear the weight of 2.62 million acre feet of water to be impounded in the lake, and it is well established fact that when deformed rocks under stress can no longer resist fracturing, earthquakes occur.

The water load of Marora dam reservoir, in Garhwal, was estimated to be 28 tons on one square inch and in spite of the fact that rocks at Marora were far more competent than the Tehri dam site rocks, the Marora scheme had to be abandoned due to existence of fault zones there. The water load of Tehri reservoir will be far greater than that of Marora, but in spite of the standing directions of the UNESCO to

that effect, no proper scientific investigation has been carried out to establish the load bearing capacity of the rocks at Tehri. The matter does not end there. The peculiar feature of the Tehri dam project site is that it is strewn with many major and minor faults which are all active and every sort of shear zones of varying width exhibiting considerable pinching and swelling in thickness along their traces and thus proving that they are active and alive have been found to exist in the project area.

The authorities assume the river bed fault to be in-active but the assumption is not supported by any scientific investigation or data. It is in fact controverted by the project report itself. The assumption made is wholly uncalled for and is in disregard of the rule of prudence that in such cases, under no circumstances a factor should be assumed to be favourable until the assumption is supported by all available data. It is well known that earthquake arise on fault surfaces when they come under stress. The tectonic peculiarities in the Tehri dam project area are more than one. The Dharlot thrust (Tons thrust) lies at a distance of only about a furlong from the project area and the main boundary fracture (thrust) of the Himalayan region of U. P. state lies at about 20 K.M. from the Tehri dam site. It is known as Krol thrust. and Nahan thrust, which is a branch of Krol thrust, crosses the dam site itself and is known to be active. The Shrinagar thrust is located at a distance of 4 K.M. east of the dam site. It has

been found to be rejuvenated and activity in it is well established by displacement of terrace deposits across the fault and the presence of Nick points in the stream profiles across the trace of fault. A thrust is a horizontally dipping fracture (fault) along which mountains get tectonically transported for several miles.

Several tear faults are present in the Tehri dam project area for example, the Gadoliya tear fault, Tehri tear fault, Tehri river bed fault, Dewl tear fault and many other EW-NW SE-NE-SW trending tear faults are present. A potentially dangerous tear fault is Mahar tear fault which is exposed 4 km. down stream of the dam site. It runs parallel to the Dewal tear and by virtue of its upstream dip lies at a depth of 7.5 km. beneath dam site. It is admitted in the project report that in the event of future earthquakes, if release of stress takes place along this tear, there may be sudden fracturing and displacement along this fault. No one can predict that release of stress in the event of an earthquake cannot and will not take place along this tear, and if it occurs, as it is most likely to occur, no one can predict the extent of fracturing and displacement caused thereby. It may result in wholesale fracturing causing overwhelming destruction.

The NW-SE, NE-SW tear faults are admittedly very dangerous from the point of view of seismic activity and according to the renowned geologist, Dr. K. S. Waldia, the recipient of the Shanti Swroop

Bhatnagar award Head of the Deptt. of Geology, Kumaon University, it is along such tear faults in the Himalayas that devastating earthquakes occur. At the dam site itself a major fault of the width of 5 metre has been proved by drill holes and the river bed fault has been found to exist from Tehri to Uppu at least. Dobata, Dobra and Uppu are respectively at a distance of about 2.9 and 12 K M from the dam site. In fact, these sites were also investigated for construction of a high dam but were subsequently abandoned, primarily on account of the river bed faults there.

Tehri reservoir is to extend upto about 45 k.m in Bhagirathi valley, and all these river bed faults from Tehri to Uppu will come directly under the water load of the Tehri reservoir. The water load placed on the earth's crust by such man made lakes has been responsible for triggering off violent earthquakes even in areas which previous to the lake filling had been earthquake free. The protagonists of this dam do admit that subsequent to the construction of a large dam and impoundment of huge quantity of water in the reservoir, seismic tremors are felt in the vicinity. Construction of high dams and impounding of large hydraulic heads seems to strain the rocks in the dam foundations and in the reservoir area to a large extent and a continuous process of settlement is known to be initiated. They maintain that such tremors are of low order and eventually die down. When confronted with the extensive damage to such engineering structures in U. S. A.

Japan etc. they vaguely assume and assert that they have invariably been related to well known fault systems which had an earlier record of movement or co-relation with earthquake focii. This averment of the dam champions is a blatant lie. First they fail to make distinction between Isostatic and tectonic earthquakes and secondly they come to conclusions without considering the relevant scientific datas.

It is largely agreed now that the several earthquakes that occurred in the Koyna dam area (Maharashtra) were occasioned by water load or that the water load hastened their advent. The earthquake at Koyna which occurred on December 11, 1967 was of 6.7 intensity which caused large scale damage to the dam structure and immense loss of life and property. Not a single home was left habitable in Koyana nagar. This happened inspite of the fact that Koyana is located in a stable and solid block of the Southern peninsular shield in India, which is a zone of minimum intensity and had no record of any earlier movement or any co-relation with an earthquake focii.

The report of the International Commission on Large Dams 1973 on lessons of dam accidents reveals that out of 10,000 dams constructed in various parts of the world, at least 166 suffered accidents and of these 140 were total failures. The Baldwin reservoir site was only 300 meters from a fault line and only minor faults were found cutting the project site.

The reservoir lasted for 12 years and collapsed on December 14, 1963 within a few hours of warning. Due to seismicity of the region, it was made a flexible structure, but the movement occurred along the fault on December 14 when full pressure of the reservoir came on the fault surface, and the reservoir gave way. The Frayle Arch Dam, Peru, a 70 meters high structure, suffered a severe accident on April 13, 1961, due to an earthquake tremor. On January 1, 1960 a severe crack developed in it and on its abutments. The Vega Tera Dam, Spain was completed in 1957-58 but on January 9, 1959, when the reservoir was at its maximum level for only a few days, it collapsed due to an earthquake shock recorded at Coimbra, Portugal, which was coincidental with the failure of the dam.

The San Fernando earthquake, which occurred on February 9, 1971, destroyed the San Fernando hydraulic fill dam completely, causing immense loss of life and property. It is said that if the shock had lasted a few seconds longer, the Upper San Fernando dam, would have also failed. The Sheffield earth-fill dam in the U. S. A. failed due to earthquake shock of 6.3 magnitude on June 29, 1929, and similarly several hydraulic fill dams failed in the U. S. A. due to earthquake shocks, of 6.8 magnitude. At least 331 dams failed or suffered incidents in the U. S. A. upto now. Out of the 54 dams in the U. S. S. R. four failed completely and three suffered incidents. In Japan 9 dams

failed completely and 7 suffered accidents and there are reports of very many dams failures from other countries of the world. The lower Suir Dam failed during construction in 1935. The reason for the failure of St. Francis High Dam on March 12, 1928 was the presence of a fault only 2 meters wide half way of the abutment. The fault surface got progressively weakend due to the action of water. The failure resulted in loss of 500 lives and property worth 10 million dollars. The Malapasset Dam France, collapsed, on December 2, 1959. The Dam was well designed, but a fault zone was present higher upstream of the dam structure, and movement on it caused the disaster. Four hundred lives were lost and the town of Frejus was completely washed away.

The claim of the champions of Tehri Dam project that the lake load of the reservoir leads only to insignificant tremors which eventually die down is wholly false. The presence of a fault one is certainly a sign of danger and huge engineering structure are not constructed on fault ones which are alive. No instances can be cited where a dam was constructed knowingly on an active fault zone. It is obvious that in the case of Tehri Dam the focus and epicentre of a violent earthquake can certainly be in the project area itself when pressure of such huge volume of water is artificially laid on the numerous fault surfaces and weak zones. It happened so in Kariba dam, Rhodesia. There was no report of any prior seismic activity in that area,

but when the reservoir began to fill in 1968, it was after six months of the filling that earthquake shocks began to be experienced and the greatest of 5.8 magnitude occurred four years after the filling was complete. The epicentre of the tremors was in the dam region itself, where some minor faults existed.

Several such examples have been cited by J. P. Rothe (1968) Faults are either active or inactive, there are no dead faults and it has been found that even those faults which have been inactive for thousands of years can become active by the lubricating action of water. The activity in such fault can be arrested by cement grouting, etc. but active faults can never be adequately treated for the obvious reason that the extent of future movement along them can never be precisely predicted. The faults in the Tehri Dam project are in fact all active, but the project report without any justification assumes them to be inactive and goes on to say that the position of the nearest active fault is not known. If the position of the nearest active fault is not known, how can a plunge into unknown be made without locating their position ?

Treatment of faults is done generally to prevent large quantities of water reaching the subterranean fire. It can be done only at the dam site where the river bed can be dried up by diverting the river water elsewhere, but it is impossible to treat the faults existing on the riverbed upstream or down stream of the dam site.

Explorations have established that apart from many other shear zones, a shear zone varying in thickness from 7 m to 20 m is present in the river course for a length of about 900 m. (300 m. down stream and 600 m. upstream) of the dam axis. The project report admits that it is part of younger fault systems in the valley and can not be considered free from adjustment in the event of future earthquakes in the region. If it so happens, what will be the fate of this dam ?

It is true that mere seismicity of a region may not be sufficient ground for not constructing a dam there, the question will always be whether there are geological faults there and whether the faults are active or not and further the rocks are competent or not. The Nurek Dam, a 1040 ft. high structure, is being constructed in a highly seismic region in Central Socialist Russia, but rocks there are a thousand times more competent than those of Tehri Dam site. It is being constructed for experimental purposes.

It is thus clear that in view of the potential presence of many major and minor faults at the Tehri Dam site, in its vicinity and along the river bed upstream and downstream, the epicentre of an earthquake shall be in the project area itself and the enormous water load artificially laid over fault surfaces will hasten its triggering off and then it can be of any magnitude. Its intensity can be 12 balls by m. m. scale and the result will be wholesale destruction.

The project report admits that the triggering off of a tectonic earthquake by the water load of the Tehri reservoir cannot be ruled out and if that possibility can not be ruled out, there can be no question of constructing this dam. Even in India distress has occurred in as many as 41 dams and more than 14 failed totally. The Kadam dam failed in 1958, Nanak sagar in 1967, Chilahole in 1972, Dantwala in 1973, Aran in 1978. The Panchet dam which failed in 1961 is said to be the biggest dam disasters in this country. The Hinglow dam failed in August 1978 which led to the destruction of hundreds of villages in Birbhumi, Bardwan & Murshidabad in West Bengal and took a heavy toll of human lives and cattle. The Morvi dam disaster of August 1979 is still a-fresh in the memory of all

The seepage from the Tehri Dam reservoir even in to the dam's rockfill is bound to be alarming, specifically from the right side abutment where the hillside is highly fissured and fissile and shear zone cross the whole width of it from the right bank of the Bhagirathi to the left bank of the Bhaintogi rivulet. The Tehri Dam project report admits that the weak metamorphic formations occurring in the foundations and on the sides of the river gorge are characterised by their shale structures as well as by their bent for intensive weathering and disintegration into separate blocks, and that under such complicated tectonic geological characteristics at the site of the Tehri dam located in a zone where the seismic effect can reach VIII-IX by

m. m. scale, the problem of any type of dam construction of 250 metres, will be very serious and complicated.

Thus the great risk is involved in the project is made clear, by the project report itself. But the project authors opine that if the fault zone in the river bed can prove to be not active then while studying and analysing all the peculiarities of the site in a detailed way as well as by means of special observations and model investigation solution of this problem safe and economical **to a sufficient extent** can be found. This is technologists over-optimism.

All the faults and thrusts in the Himalayas are active and alive and it can not be denied that the river bed fault is not active. Assuming it to be inactive the project authors give a guarantee of the safety of the dam **to a sufficient extent alone**, where as in such a matter a guaranteed security is needed for the obvious reason that if the dam bursts, it will result in a catastrophe unprecedented in the history of man. Whole of the Ganga basin from Munikireti to Calcutta will be wiped out of existenee. And, if the river bed fault zone be active, then there can not be even one percent security of this dam. It is so obvious from the project report itself.

Sri Y. K. Murti Ex. fellow Chairman of the central water commission of India in his paper read at the 54th Annual Session of the Institute of Engineers

(India) at Banglore, Nov. 3, 1978 admitted that the dam at Tehri would not only be the highest structure of its kind in the world but would call for tackling complex technical problems involved in a rockfill dam of such a height for which there is little precedence available else where in the world." He further admitted that "despite thorough investigation and adequate design it is not possible to eliminate all possible hazards. . . . Despite all advance in technology and improvement in dam Engineering over the last decades, the surprises in the course of execution and operation of Dams & reservoir cannot be eliminated altogether". The question is can we take this risk by building such a dam in the Himalayas, and let the Democles sword hang over the head of the Ganga basin for all days and nights ?

Henry H Thomas an Engineer of world fame in his book "The Engineering of large dams" has advised that the Engineer should not hesitate to overrule academic calculations. however positive they might seem to be if there is any element of doubt about the safety of the reservoir. He is a great protagonist of large dams, but frankly admits that we know of failure, is undoubtedly true in all phases of life but it is a method we can not afford to adopt in building of dams, undue boldness in design might ultimately end in disaster... .. The statics of failure of dams are some what alarming..... The cost of security can be ascertained with reasonable accuracy, if proper.

investigation have been done, the cost of failure is immeasurable. Damage to property may be assessable, damage to environment is less tangible but no less real but loss of life is a matter of personal suffering. Water can lubricate clay seams, it can adversely affect the physical properties of most rocks, it can act as colossal hydraulic ram, it can erode and corrode, it may induce earthquakes, and if the dam should fail it will devastate and destroy Cost is of vital importance, but security must always be paramount.

It is thus clear that if guaranteed security of the dam may not be available, it will be a case for rejection of the proposal rather than a case to go ahead with it. The project report of Tehri Dam does not give any guarantee of security of the dam. It says that the safety of the dam can be assured to a sufficient extent alone and no further, and that too if the river bed fault be found to be inactive. The project champions, assume the river bed fault to be inactive without any rhyme and reason ignoring the opinions of Geologists, scientists and all tenants of common-sense.

As I have stated above, the Tehri Dam site is risk laden to the extreme. The project report itself leaves no doubt about it. The complicated tectonic and seismic activity of the site, the presence of fault zone of width of 15 m in the river bed, completely low strength of rock formation, high deformity of the rock differences in the properties of rock formations in the

side of the gorge, comparatively low factor of shear resistance of rock in foundation, heavy cracking and large number of fault zones in the exterior zone of the slopes of the river gorge have been well established by exploration apart from other dangerous tectonic peculiarities found in the whole of the project area.

While the project report categorically admits that the lake load of Tehri reservoir can trigger off a tectonic earthquake, it is amazing that the dam champions make groundless assumption on the basis of unwarranted comparisons. They maintain that the quantity of water proposed to be stored in Tehri reservoir will transmit to the foundations a load of nearly 3.2 billion tons and as that will be only 30% of the Govind sagar, nearly 6% of lake mead and only 40% more than that of Shivsagar (Koyana), therefore the water load of Tehri reservoir will be too small to cause any large scale earthquake. In making this assumption they conveniently ignore the fact that no two dam sites in the world are the same nor have the rocks same properties. It is admitted by Sri Y. K. Murti and even by Henry H. Thomas and it is obvious that no two dam sites are exactly alike any standardisation is neither desirable nor possible. The intensity of the earthquake always depends on the depth and distance of the focus and epicentre, the nature of the rocks, the sub-structure and solidity of the structure.

Technologist's over optimism may think to build a dam over an inconceivable site, but common sense

may dictate that it is too risky and unwise to do so. Universities confer degrees and some persons become technologists, but common sense is a gift from God. The common sense of the people of Teton, who were opposing the vast Teton dam, did prevail over technocrates assertions, when the Teton dam broke on 5 June 1975. Three town were completely washed away and property worth more than Nine bilion dollars destroyed. There cannot be a standard set of guide lines for ensuring the safety as problems vary from project to project and so no two dams have failed in the same way and that exact evaluation of short term and long term changes in dam and its foundation which will pose ultimately a threat to its safety is still and shall always remain an excercise in the domain of uncertainty. We can not put an implicit faith on technology which is basically improvisional. It treats the symptoms but does not provide any lasting cure. Technology in fact is becoming itself a problem for mankind.

There can be no room for any doubt that the chances of the failure of Tehri dam do exist in abundance. and it will be unwise to ignore them on the assumption that it is a bare or remote possibility or that the evil may possibly be avoided by recourse to remedial measures. The people have to be guarded against such risks which no prudent and reasonable man will incur, even if there may be no absolute certainty of its occurring. The rule of prudence demands that we balance

the magnitude of the evil with the chances its occurring, and even if there be less imminent probability of it, the risk can not be taken for the simple reason that if the evil does occur at any time, i. e. if the dam bursts the resultant mischief will be vast and overwhelming.

Tehri dam is an unwarranted attempt to disturb the fragile eco-system of the Himalayas which is the youngest mountain chain in the world and which has not yet attained isostatic equilibrium. A little exercise of reason can foresee the immense likelihood and potential of Tehri Dam ending in a national disaster. The scientists have been warning mankind of the dangers involved in such projects, They are warnings not just of difficulties but of a major disaster.

Must we demand the evidence of catastrophe before we act ?



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elling work of the dam was started under the protection of helmeted armed police.

Before starting the movement against the dam the Samiti decided to file petition in the petition committee of the Parliament. But, unfortunately due to the dissolution of the Parliament the petition lapsed, and a new Govt. formed at the centre. Dialogue is now going on between Sangharsh Samitee and the Govt. In the mean time before taking the final and decisive action, the Samiti resolved to publish in small booklets all the materials available to create awareness amongst the people about the evil consequences of this dam, and the present booklet is one of them. Sri Saklani has very deeply studied, the Geological, seismological and ecological aspects of this dam which if constructed is bound to prove baneful to the Nation.

I hope that in this booklet and in many other booklets, articles and letters written in this respect, the readers will get a complete idea as to why this project is being opposed, and I very much hope that they will make a common cause with the Tehri Bandh Virodhi Sanghrash Samiti in turning down this project.

Sardar Prem Singh
General Secretary

Tehri Bandh Virodhi Sangharsh Samiti

BROTHERLY LOVE FOR THE WOMEN

SEVERAL women gathered on the bank of the Balganga River in the Tehri Garhwal District of the Uttar Pradesh Himalayas are holding an extremely serious discussion. This is the monthly meeting of the local Mahila Mandal at which the women from a cluster of villages gather to discuss and find solutions to their mutual problems.

The issue that is vexing them just now is that Rudhu, a man who had served for some years

in the army before returning to his village, was frequently found not only drinking but also investigating others not to become too tony and to enjoy their drink.

One sunny morning about half a dozen women set out with a local official for a rather remote forest somewhat removed from the clusters of human settlements. It was at this place that the illicit distiller apprehended an attack by the activists of the Mahila Mandal had set up shop. A few men had gathered there early in the morning. On seeing

Most of the other women present at the meeting suspected

ing the women approaching along with the patrol on the serpentine hill path. They fled.

But the woman who apprehended and his equipment, despoiled of mules, was the president of the Mahila Mandal along with five other activists who cornered Rudhu. They subjected him to a three-hour ghato in the course of which he had to hear all sorts of taunting and sarcastic remarks from the women who were from families related to him. It was only when a highly embarrassed Rudhu literally begged them to spare him and promised that he will never again encourage others to drink and also will himself keep away from drink that he was spared.

This was not an isolated action but one of a series of efforts made all over the Garhwal region, specially in Tehri Garhwal District, to fight the drink evil. These efforts started nearly a decade back when a group of concerned social workers, mostly belonging to the Sarvodaya movement, realised the havoc that increasing liquor sales among the masses were causing to the economy and social life of the region. Intermittent protests against drinking was conveyed through discussions, and skills held at the time of small morning processions, called Prabhat Peris.

In the course of these initiatives it was discovered that the women were highly receptive to the message and were in fact very eager to do something against the increasing liquor menace. As more and more men were addicted to liquor, not only were the meagre earnings frittered away on liquor but in addition the entire household work was passed on to the women and they also had to put up with the violence and abusive behaviour of their husbands when they were drunk.

The response of the women encouraged some Sarvodaya workers to organise a meeting in their Tehri Town to demand the prohibition of liquor shops in the market. Not only did the normally shy hill women come to attend the meeting but in addition they joined protest

denonstrations and picketing of the liquor shop. Finally the Government and the administration agreed — not to the closure of the shops but to lending to shifting it away from the market to the other side of the Tehri Bridge.

This was certainly a victory for the incipient movement, but what the administration's stop meant in practical terms was that the liquor shop now became more accessible to the people of another area known as the Athur region. The Sarvodaya activists now decided to organise the people of these villages against the drink evil. Moreover, they realized that the demand for shifting the liquor shop was not adequate, as this merely meant reduction in the misery of some people at the cost of increased misery for some other people.

Activists of the movement fanned out to the neighbouring villages, rakes and pamphlets in their hands, to spread the word and inform people about the success already achieved.

The general experience of prohibition familiar to us is that it led to widespread corruption and large scale bootlegging. Those who wanted their bottle continued to get it, only now it was more often of the poisonous type which led to more disease and deaths. However, in some parts of the country Prohibition has been a success with the people's involvement, and in some other parts even without the legal sanction against the consumption of liquor bottles have been made to give up liquor by organising a mass campaign against it. In two articles here, Bharat Dogra presents two case studies of such success stories from the Garhwal region of Uttar Pradesh and the Chattisgarh region of Madhya Pradesh respectively.

the provocations, the movement remained peaceful. Several leading activists and the Government were arrested, but it was the fight against the drink evil. But for this most of the extra money available to us would have been gobbled by the bottle."

This was Sonarim Bai, one of the Chattisgarh tribal women who work as miners in the iron mines of Dalli Rajhara, in the Durg District of Madhya Pradesh. Sitting in her small but meticulously neat and clean hut, I had asked her about the rise in the standard of living of workers brought by the steady rise in the wages of the workers as a result of the or-

ganised struggle waged by their women, the Chattisgarh Mines Shamrik Sangh (CMSS) led by Mr. Shankar Gaha Niyogi, and she had acquainted me with the entirely new dimension of the workers' aspirations for a better life.

Subsequent enquiries revealed this to be a remarkable experience in mobilising habitual drinkers to give up or at least substantially reduce their consumption of liquor. The consumption of home-brewed liquor by the tribals of this region is an age-old practice. When thousands of them flocked to the new mining township about two decades back, curbs were put on the home-brewed liquor and they turned to the licensed liquor shops. It was revealed in the course of the enquiries that we made that at least in the opinion of most tribals, home-brewed mahua liquor, apart from being cheap, is also considered much less harmful for health. Thus in the urban environment of the consumption of liquor became an even more difficult for the tribals, with

PEOPLE'S POWER FOR PROHIBITION

indefert or unadulged liquor. However, at places where the movement of the liquor contractor exerted pressure on the officials to summon police, and the tribals were being used to humiliate and terrorise the protesters and also tried to provoke them into violence so that the movement could be given a bad name, the police force was used against it. However, despite all

"WHAT really helped us to improve our life was to wage it, it was the fight against the drink evil. But for this most of the extra money available to us would have been gobbled by the bottle."

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their tradition of attaching the highest importance to trust and loyalty, to give up liquor on a mass scale.

A two-pronged strategy was evolved to deal with the hardcore liquor addicts. They were approached individually by the union activists and told that they will have to respect the union's programme. At the same time, as a concession to the problems faced by some in entirely giving up a habit at a late stage of life, they were issued special forms which entitled them to consume a small quantity of liquor in the privacy of their homes.

Those who violated the union's regulations were punish-

In 1977, when Niyogi and his colleagues organised the miners under the CMSS, they realised that liquor was the biggest obstacle in their path. They realised the workers socially conscious as well as improving their standard of living. Go at an early stage of the union's activities. A campaign against the consumption of liquor was made an integral part of the union's struggle for improving the lot of the miners of Dalli Rajhara and other neighbouring areas.

It was realised that with a little extra money on their hands (obtained as a result of the union's struggles), several miners invariably headed for the liquor shop to while away their

evening hours. So alternative sources of entertainment during the evening hours were explored. Folk song and bhajan sessions were held at the union office. Attempts were also made recently to enact dramas on the day-to-day problems of the workers, and even to acquire a projector for screening films dealing with social change.

(In fact an optimistic letter from Bombay arrived regarding the purchase of the projector just when I was talking to the workers). Some workers were assigned specific tasks during the evening hours such as looking after the schools started by the union, or the hospital being constructed by it. Some were asked to keep a watchful eye on some quarrelsome members of the union and the liquor and gambling addicts.

A climate was created in which the workers began regarding drinking as a matter of their commitments, to the union and its struggles. Once this feeling was created, it was not difficult for the tribals, with

ed initially with a fine which was later secretly returned to the wife of the offender. However, once this secret leaked out and the offenders became careless about the fines, genuine fines were also extracted from them. In some cases, a social boycott was imposed on the offenders, and sometimes other disciplinary actions were also taken. But perhaps the best technique was to coax and motivate the offender's wife and other family members to continuously argue with him and harass him to a point when he gives up liquor in sheer desperation.

It would be an exaggeration to say that drinking has been eradicated among the miners of Dalli Rajhara and neighbouring regions. However, there is no doubt that it has reduced substantially to the extent that the dominant liquor contractor of this region who made fabulous profits earlier will never recover his investment. Niyogi and the CMSS have certainly set a remarkable example for other trade unions.

66 THIS man is hand in glove with an illicit distiller whose interests he is protecting by encouraging others to drink. We must attack both of them at one go."

U.P. 9
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AGRINDUS INSTITUTE

The Agrindus Institute, Barwasi Sewa Ashran, Govindpur, Via: Turra, District Mirzapur, Uttar Pradesh, was established to make a planned experiment in post-gramdian development, covering 150 tribal villages in Duddhi Tehsil on the central tribal belt of India.

Objectives :

The main objective of the institution is to promote rural development on the basis of self-help and initiative of the people. Towards this end, the institute provides an institutional base with a self-reliant workers' community to catalyse people's development efforts in the villages, plans and organises various training courses for farmers, village leaders, youth workers and other sections of people in the area as also of those from other parts of the country.

Programmes :

Demonstration Farm : The institution has a farm of 50 acres of land converted from a rolling mass of waste land and it has been developed on a laboratory scale. It is a good example of land reclamation, soil and water conservation, construction of earthen dams to store rain water for irrigation, laying out a system of gravity channels and pipelines, introduction of various crops like wheat in the area, use of high yielding seeds and fertilisers, rotational cropping pattern and over-all farm management and agricultural planning.

The farm is today not only self-supporting but also yields a margin of about Rs. 20,000 annually to the institution for the multifarious social service activities. Its success has demonstrated that so-called wastelands are, after all, not eternally waste but given the will they could be turned into most productive fields. It also shows how human ingenuity can devise means to use every drop of rain water for the thirsty crops and human beings and animals.

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COMMUNITY HEALTH CELL
47/1, (First Floor) St. Marks Road
BANGALORE - 560 001

Village Reconstruction : The village reconstruction work was taken by Banwasi Sewa Ashram even before the Agrindus Institute was started. This was necessitated when the Ashram was joined by the State Bhoodan Committee in the task of distributing over 5,000 acres of forest land donated by the Government and private land holders among about 1,300 landless tribal families. It was not just allotment of land but its proper utilisation by the tribal people with their primitive agricultural habits. This rehabilitation work was perhaps the precursor of Gramdan coming to the area, which, in turn, called for more intensive work in the villages. This is how the Agrindus Institute came into being.

With the establishment of the Agrindus Institute with initial financial assistance from War on Want of England, the reconstruction work in the villages became more organised and regular. The work envisaged in the villages is not simply in terms of physical things like dams and farms but to infuse new ideas into the life of the people and new methods in their work. Under the Food for Work programmes, a number of check dams and irrigation channels were constructed by the villagers with the Institute providing supervision, technical assistance and supply of materials.

These activities increased the aspirations of the villagers who wanted training in better farming methods. So by 1973, about 1,000 farmers were organised for training and production campaign. They were given extensive training in better methods of cultivation, provided seeds and other inputs on easy terms. And the result was encouraging; they harvested crops which were two to three times more in their yields.

In these 150 villages, intensive development work is in progress. Each village has a Gram Swarajya Sabha which is the functional body at the village level. Although it has not been possible to organise these villages on the basis of Gramdan in the

absence of Gramdan law in the state, the villagers themselves have agreed to the community ownership of land and integrated development for the entire village.

Some of the salient features of development in these villages may be summed up as follows:

Irrigation :

Irrigation facilities have been created in 100 villages by constructing check dams. By December 1975, 30 medium and 400 small-size dams were constructed and nearly 1,500 acres of land in command areas have been turned into multiple crop lands. This work involved 500 to 7,000 people working every day for over seven years and was supported by CASA, War on Want, OXFAM, Bread for the World, and Protestant Central Agency for Development Aid.

Supply of Farm Inputs :

Creation of irrigation facilities was not enough to inspire the tribal people to take to modern methods of agriculture which are new to their pastoral style of life. The land allotted to them needed improvement, contour-bunding and terracing in certain areas and a credit system to finance development activities. A revolving fund of nearly Rs. 1,60,000 has been created to provide necessary development inputs. Credit is, however, given to the Gram Swarajya Sabhas of the villages which supply the services of individual villagers.

Removal of Indebtedness :

Private money lending was a big business here as elsewhere in tribal areas. But the credit was never an instrument of development but of exploitation of the poor tribal people. Their land was alienated, their valuables were mortgaged and they were themselves compelled to become bonded labourers of their exploiters. To wriggle the people out of this exploitation, they had to wage a number of struggles against their exploiters in which the workers of the institution gave them necessary guidance and leadership. Although

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complete eradication of moneylending has yet to be achieved, the usurious rates of interest have been scaled down and the rigours of bondage have been removed. The Gram Swarajya Sabha have started building up their own fund in the form of Gram Kosh.

Settlement of Disputes :

Disputes usually lead people to law courts and sundry intermediaries only to be exploited. In this area, disputes were mostly between the weak and the strong - the simple tribals and their exploiters in the garb of the police, local officials and money-lenders. With the introduction of various development programmes and increased contact and cooperation between the people and the workers, the incidence of disputes has been reduced. Initially the workers intervened to settle these disputes. Now this work has been taken over by a people's court (Lok Adalat) with its centres at various places. With representation from Gram Swarajya Sabhas, teachers and community leaders, it is this Lok Adalat that disposes of most of the cases to the satisfaction of parties to the disputes. Every year it settles between 300 to 300 cases brought to it.

Drinking Water :

In order to provide potable water to the poor people, 50 wells were dug and 25 renovated. Old wells were not deep enough to retain water upto summer and it was difficult to deepen them because of hard underground rock. This problem was solved when a drilling rig was made available to the institution by way ^{of} donation by War on Want. With the help of this, 100 deep-bore wells were constructed.

Agriculture Training :

The Agrindus farm provides an excellent training ground in agriculture and allied skills. Over the years, training has become a permanent feature of the farm. On average, 35 training camps and seminars of various duration ranging from one day to 8 days are held

every year which benefit 1,500 trainees. The institute has provision for stipends of Rs. 75 to Rs. 100 for 50 trainees for a duration of 6 months. Training is imparted to them in specialised jobs like crop planning, improved agricultural practices, operation and maintenance of tractors, diesel and electric pumps, maintenance and repairs of engines and other farm inputs, smithy, plumbing, electric fittings, soil conservation, construction of dams and irrigation layouts, animal husbandry, dairying etc.

Functional Literacy :

Until 1967, over 93% of the people in the project area were completely illiterate, making it difficult for workers to communicate progressive ideas to them. In 1968, a functional literacy programme called 'Gram Shikshan Yojana' was introduced. Under this programme, evening literacy classes were started in 100 villages chosen for intensive operation. They are linked with a chain of mobile village libraries equipped with books and journals meant for neoliterates. During last 7 years, 20,000 adults and young men were made literate. The number of mobile libraries has now increased to 50, reaching out to about 5,000 readers in 150 villages. Special books have been written for them and the syllabus is tailored and oriented to the functional needs and solutions to the day-to-day problems of the people.

School for Children :

When you have a literacy programme for adults and no provision for the education of the children, there would be no future development. In this area, parents were not encouraged to send their children to school because the latter are also economically engaged. However, a beginning was made in the form of nursery school established at Govindpur in 1970. This was later on upgraded to primary school level and in 1972 a junior high school was started. In 1975 it had 150 children in the junior high school and 65 among them were residents in the hostel.

Health and Family Welfare :

Semi-starvation, mal-nutrition and scarcity of safe drinking water were combined to breed many diseases, often spreading epidemics like small pox, dysentery and malaria. High mortality rate itself acted as a family control for the tribal people. The institution's medicare was, therefore, geared to both prevention and cure of diseases, aided by health education, nutrition and family welfare programmes. Its dispensary-cum-hospital is equipped with qualified staff and stock of medicines. Nearly 10,000 patients are treated annually. Training of local people in health problems is another unique programme, and so far, about 250 people have been trained in this.

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RAJASTHAN - Health + Dev. Projects

1. Social work + Research centre (R-1)
Tilma, P.O. Madanganj, 305512,
Ajmer Dt., Rajasthan
GPF
2. Sewa Mandir (R-2), Fatehpura
Udaipur 313001
GPF
Rajasthan
3. Organizing Soc. Rajasthan VNA
Sophia Hr. Sec. School.
VNA
Mirshahali colony 305001.
Ajmer.
4. President, Rajasthan VNA
Methodist Church,
VNA
opp TB Hospital
Ajmer 305001
5. Soc. Rajasthan VNA
VNA
E/17 Hansarover,
Shastri Nagar Ajmer-305001
6. Dept of BPM,
IAPSM
JLN Medical College
Ajmer.
(RFA - Sanadhana, Udaipur
+ Mobile Rupamun service hospital)
7. BPM Dept.
IAPSM
SMS Medical College
Jaipur. (RFA - Naida)
8. Narendra gupta
MFC
Devgarh, Deoria
via Parbhargarh,
Chittorgarh Dt. 312605

Dr. Sanjit Roy

Mr. Kishore Saini

Sr. Terézine Dias

Rev. Dr. Daniel

Mr. Hugh Toussy

U.P. - Health + Dev. Projects

1. Agrindus Institute (UP-9)
Banwasi seva Ashram,
GPF Govindpur, via Taura
Dr. Muzaffer - UP.
Dr Ragini Prasad
+ Prabhakar
2. Amarpur Bahi Village Project,
SYS P.O. Bahi, Dr. Haradabod.
Mukul Singh
Director.
3. Gram U. 1225 Sanstha (UP-12)
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Dr S.M. Harwath,
Dr Bharatendu Prasad.
5. Vigyan Shiksha Kendra
Aligarh, Banda.
SYS. IIM. UP - 210201
Dr NK Baraban.
6. Community Health Project (UP-4)
UNICEF ICMR UWA1. Morier Bowen Memorial Hospital
Lalispur
Jhansi Dr - UP.
Dr Dunder Shaw
7. Sec, UP JHA
VHA. Clara Swain Hospital,
Bareilly - 243001
Dr Erasmus.
8. Rural Com. Hlth + Dev. Project (UP-1).
VHA (Soya product + research Assn)
Fazdipur, Dr. Bareilly
243503 - UP.
Dr David Thomas
Director.
9. Com. Hlth Project. (UP-2)
VHA. Craghton Freeman Hospital
Brindavan - UP - 2
Dr David Thomas
Director.
10. Com. Hlth Programme, (UP-3)
VHA. Landau Com. Hlth Hospital
Radbury View.
Khandousa cantt
Mussoorie - 248179
11. CENSIT Rural Hlth Project
VHA SYS. Sahranpur - up for Delhi
12. CHIPKO. + UP-7)
Silyana, Garhwal,
UP - 249155.
Mr Sunder Lal
Bahupura
13. GSM Medical College
IAPSM Kanpur. (RPPA - Kanpur)
14. MLB Medical College
IAPSM Jhansi. (RPPA - Chirgaon PHC)
15. MLN Medical College
IAPSM Allahabad (RPPA - Chaka. PHC)
16. JLN Medical College
IAPSM Aligarh Muslim U. Aligarh (Jansen PHC)
17. SN Medical College
IAPSM Agra (Sainyan PHC)

BIHAR - Health + Soc. Projects

1. Gram Numan Mandali (B-5)
GPF
NIMFW
Saraswati Ashram
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2. Gram Bharati (B-7)
GPF
Saraswati Ashram,
P.O. Sunuliala, 811316
Dist. Monghyr, Bihar
3. Samawaya Ashram, (B-6)
GPF
Booth Gaya - Bihar
4. Xavier Institute of Social Service (B-5)
GPF
St. Xavier's College
P.B. No 9, Ranchi 834001,
Bihar
5. Holy Cross Polytechnic (B-12)
Mazumbarh
Bihar
6. Health + Security group (B-11)
MFL
Ch Binelandu Das
P.O. Japdishpur
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Manor Gompuli
7. Executive Officer (B-10)
SYS.
Bihar Water Dev. Society.
Kudra P.O.
Rohlas Dist - 821108
Bihar
John H. Talang
8. Handar Project (B-9)
CHA
Ranchi
9. Xavier Institute for Social Service (B-5)
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Pumlia Road, Ranchi 834001.
10. Brothers to All Men International (B-1) Dr. A. Paul
UNICEF
VHAI
P.O. Buniadgari,
Gaya - 823003
11. Agricultural Community Dev. Project (B-4)
UNICEF
Kushli, Samudayik Vikas Yojna,
Palamau (Bhandaria Block)
Bihar. (+ Surguja - MP)
12. ~~Exec. Soc.~~ Exec. Soc. Bihar UHA
VHA
NIMFW
Kings Holy Family Hospital
P.O. Sadaquat Ashram, (trans project)
Palna - 800010
Mr. M. Zaman
13. Presidew - Bihar UHA
VHA
Methwahsi Hospital
P.O. Thapsar
Buxar, Dist. Bhajpur,
802101 Bihar
Dr. Sikas Singh
14. Sec. Bihar UHA
VHA
Administrata, New Sivan Hospital
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15 Community Health Project,
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Balasore Dist. Bihar.

Sr Josephine

16. Philip Murren,
Santhal Tribal welfare &
cultural society,

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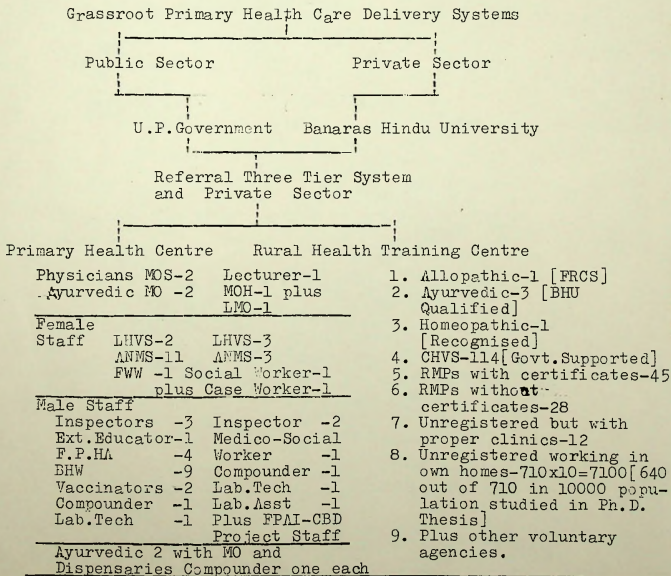
Jayalpur, Karla
PO Bhagaya, Dist S P,
Bihar.

COMPARATIVE EVALUATION OF GRASSROOT
DELIVERY SYSTEMS IN CHIRAIGAON BLOCK

by

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In the Chiraigaon Block [Projected 1979 population of 1,33,723], the grassroot Primary Health Care delivery systems were analysed as indicated below:



In terms of health care delivery, it could be roughly indicated that approximately one third of care was delivered through public sector, one third through private sector and one third through home remedies [not included here]. The consolidated comparative evaluation methodologies for the grassroot delivery systems in the Chiraigaon Block are highlighted.

(1918-1919)

1918-1919

1918-1919

1918-1919

1918-1919

1918-1919

A glimpse of good work-I

Banwari Sewa Ashram
Mirzapur.

By Arun Shourie

ON September 6 several newspapers carried dispatches from Lucknow about exchanges in U.P. Legislative Council regarding the activities of an ashram in Mirzapur district. A reader glancing through the dispatches would have been left with the impression that the report had been placed on the table of the Legislative Council which showed that the ashram was a hot-bed for CIA agents, including the CIA naturally, that it had been gobbling up money for work claimed it had but which in fact it had not done, and that the Government had seen enough men in the report to refer the matter to the State's Crime Investigation Department for a detailed inquiry.

The facts are that the Minister who tabled the answer to a question made fun of the so-called report: that the "report" was not a report at all but an idiotic communication that had been sent earlier. Chief Minister two years ago, that since that communication the U.P. Government had again examined the work of the ashram and after satisfying itself about its conduct, had released funds for the programmes of the ashram that earlier the Agricultural Finance Corporation, our largest financial institution for the agricultural sector, an institution that today has as its members 15 nationalised banks, 16 non-nationalised banks and 6 foreign banks: that this institution had just made a detailed 187 page evaluation of the ashram's work and had praised it in glowing terms.

The day after the discussion in the Council, persons from the ashram released a detailed refutation of the allegations that had been made in the communication. This response was furnished to the correspondents of every paper represented in Lucknow as well as to news agencies. Several correspondents did not even file the response to their papers. In any event only one paper devoted three paragraphs to the rebuttal, reducing it to clichés. The papers that had made most of the reports did not carry even one word of the rebuttal. It was only a week later and that too by sheer coincidence that I learnt which the ashram's name had been talked about. I learnt the details I was horrified for it soon became clear that the Press had been party to spreading calumny. As this is not the first time this has happened and as, in spite of goodwill at the usual resolutions, it is unlikely to be done in the future, I went to study in some detail the dispatches from Lucknow, the "report" that was said to contain the relations as well as the facts.

But first a bit about Mirzapur, the ashram and the work it has been doing for the past 25 years. Mirzapur is the country's largest district in the country. Larger, in fact, than some of our States and one of the poorest. The district is cut in two by the river Son which flows from the West. Pradhly in the west flows to Bihar in the east. The area to the south of the Son, known as Sompur, is the one that concerns us. Four blocks in Sompur comprise the area in which the Banwari Sewa Ashram has been operating.

These four blocks cover about 2,000 square miles, and have about 400 villages. About 200 persons live in them, most of them tribals. They are among the poorest, even by the standards of a poor region like eastern U.P. The villages in these blocks have been taken up for intensive development. In another 100 efforts have been limited initially to helping 10 to 15 per cent of the families.

The ashram was set up in the mid-fifties. For twenty years it was engaged mainly in relief work. By the late sixties, it was prone to droughts and floods. By the mid-seventies as a result of the recommendations

of the National Agricultural Commission a plan was drawn up to execute a new species of development projects. The projects were included in the Fifth Five Year Plan.

The work that has been done by the ashram is revolutionary, and I use the word advisedly. What the ashram and its dedicated workers is a job. To grasp its revolutionary nature, you must first picture the district and the kind of projects that in the normal course tend to be pushed in such areas.

As is the case with adjacent Bihar, Mirzapur is rich as rich can be, in arable land, in irrigation potential, in minerals, in forest wealth. The huge thermal power station of Obrha, Khand dam and its power station, the large cement factories of the U.P. Cement Corporation, the Birla giant Hindalco, an impressive chemicals factory of Kanoria, one of the country's most highly automated coal mines, all are here and more are in the project area of the ashram. Two super-thermal power stations, one at Kola and the other at Bina, are coming up at an outlay of about Rs 1000 crores. As a result of the dam, a Rs 60 crore dam is being put up across the Kanhar River. So, large projects and enormous investments there have been aplenty.

Yet, for 3 to 4 months a year tribals, who constitute the bulk of the population of the area, subsist on malhuwa, a flower that grows wild and on chakras, a wild grass.

Twenty thousand jobs, the Government says, will be created during the next three years in the four blocks as a result of projects in hand. As the Advertis do not have the skills that will be needed in these jobs will go to persons other than them, the poorest of the poor.

Or consider another statistic. The annual income of Central and State Governments from this area is estimated to be around Rs 200 crores. Rs 20 crores would suffice to secure the area against floods and drought, the alternating plagues of the area. But the outlay is never forthcoming.

Consider yet another pair of figures. The development outlay in the four blocks in which the ashram's project is being run is around Rs 40 lakhs a year. On the other hand, every year liquor (illicit) trade, that is worth about 15 crores is said to be distributed by way of direct and indirect taxes on this liquor, the Government every year siphons off Rs 60 lakhs from the very tribals on whose development it generously spends Rs 40 lakhs.

By the mid-seventies workers at the ashram summarising their experience of twenty years came to four conclusions.

They concluded, first, that the existing system of administration, planning, and development touched on development had become anti-people. Through their experience on the ground they saw how strong the nexus was between the liquor merchants, the forest, the money lender, the local official and the local politician. You may pass what plans you will in Delhi they learnt, but the nexus on the ground would ensure that the outcome always went in favour of these notables. Moreover, they learnt the plans that would be formulated in Delhi or Lucknow would also be to a bitter. The Kanhar dam costing Rs 60 crores would be taken up but not small tanks and bunds on each rivulet. To cite just one reason why this is so, monsoon rains are expected to be reduced from 100 inches to whom a Rs 20-crore project had been divided (10 per cent is the going rate say the correspondent in Lucknow) from 2,000 families U.P. of whom 500 are the work on its portion of the project.

Second, their experience

taught them (and as they were Sarda's workers it confirmed for them) what Gandhiji had taught: that no outside agency can do the people's work for them. Its role can only be to should only be to enable role. To be mobilised to take matters in their own hands, they had to be mobilised to solve local problems by local initiative using local materials. This had several operational implications.

Plans had to be built from the bottom up: what do these families in this locality need, what are they doing now, what resources and skill do they have, what can be done to improve these? Similarly, the fact that an outside agency must perform an enabling function only meant, for example, that it could establish a dairy with cross-bred cows or a hospital, its purpose would not be to provide milk or medical facilities to the entire population but to develop skills among the people themselves so that they could manage cows or diagnose ailments and handle them.

Third, their experience taught them that the obstacles were so formidable that results could be achieved only if the entire community was mobilised. Watersheds could not be managed by individual farmers acting individually. The money lender-contractor-liquor merchant nexus was so strong that it could not be broken by individuals, however brave and daring, acting individually.

Fourth the workers were convinced that development and change could not be brought about by charity. Rs 20 crores would be required for eliminating floods and drought. Another Rs 20 crores would be needed for land development and ravine reclamation. Outlays of this kind could only come from the State and they would come only if political pressure could be brought to bear on it. And who would bring this pressure to bear? Only people who had become conscious of their power and their rights, not ones who had been conditioned to seek charity.

All of us have heard so much of all this so many times in the past two decades that it all sounds like a cliché. And yet Sonpur is one area in which these principles have actually been put into effect.

The results have been dramatic. In four years, reports the Agricultural Finance Corporation, per capita income has increased by 75 per cent. Thirty-five per cent of the families have been brought above the poverty line. Gross cultivated area has increased by a third. Intensity of cropping too has improved. Two hundred literacy centres have been opened and, unlike many schools that appear in our education statistics, are functioning. The programme has, to quote the AFC evaluator, "made a tremendous impact on the health of the tribals and (has resulted in) reduction in mortality rate, simultaneously increasing the longevity of life among the children and adults... on an average 20,000 patients are treated by the ashram's clinic and its five health posts... it must eschew figures for want of space. But six general features should be noted.

First, this is one project area in which achievements far outstrip targets. The target for land development was exceeded by 87 per cent in the 100 villages under the plan, made up of the 5 villages: For area covered under high-yielding varieties by 86 per cent and 50 per cent respectively.

Second, all this has been done by small projects, specifically designed for individual families for individual ravines. Put up a bund at the top of this ravine

to make a small tank; convert the unused land further down into terraces; percolation from the tank uphill will ensure moisture to the new terraces, banana trees, introduce mulberry trees train people in sericulture. Such ideas would not strike city dwellers like an idea even when confronted with them he would not grasp their importance as it cannot comprehend the level at which life is lived in large areas of our country.

Third all these projects have been selected, executed monitored by people's institutions—the Gram Swarajya Sabha and consisting of all families in the village the Kshetriya Gram Swarajya Sabha at the block level and the Kendriya Gram Swarajya Samiti for the project area as a whole. This has heightened group consciousness as well as the sense of responsibility towards others. Consider a small example. Loans are being given to families through revolving funds managed by the Gram Sabhas. The ashram has formulated norms for repayment: 10 per cent of the family's annual development work, 3 years for loans given to purchase bullocks, one year for seeds and fertilisers. The Sabhas do not fix any regular schedule of repayments, they settle repayments on the basis of the crop of the borrower every season. And yet 40 per cent of the repayments invariably arrive when the normative instalments fall due. The repayments, notes the Agricultural Finance Corporation, team "compare very favourably with recovery rates of financing institutions which have a much firmer legal hold over borrowers' assets".

Fourth, at each stage, each of these improvements has been put on a self-sustaining basis. Outsiders have not come and done something for the tribals. The tribals have learnt the skills needed for the activity. All the work in the area, to take one example, has been planned, executed and supervised entirely by ashram workers and trained local workers. As a result building — not mud huts but strong structures of stones, locally baked bricks and tiles — are being put up at an incredible cost of Rs 3 to Rs 8 a square foot. As locals are the ones who are doing the work, things can be done that just would not get done by outsiders. The city-dwelling MID would travel to these areas without a jeep, but the locally trained tribal thinks nothing of bicycling 35 kms a day.

Fifth, it is not just that the numbers regarding per capita income, irrigated area etc. are higher. The way of life of the people is changing. Tribals who had only cut trees for centuries are now planting trees yielding mangoes, jack-fruit, banana, lime, guava. A population that till 15 years ago knew only slash and burn agriculture is now growing the houses. People who knew only to leave the animals free to roam in the forests are now stall-feeding them with fodder.

But more significant than all these figures is the revolution in the tribals' consciousness. Watershed management, planting of new crops and trees has taught them that nature is not a god beyond their reach. Selecting projects, executing them, managing them, learning new skills, setting up and running new forms of self-organisations has taught them that the money lenders, contractors and liquor merchants are not gods either.

"Enough of your figures and points. Tell us about the CIA." (To be concluded)

A glimpse of good work-I

By Arun Shourie

THE work of the Banwar Sevā Ashram has improved the living conditions of the tribals in Sonepur, Mirzapur district of course, more important, it has altered their consciousness, their ability to manage their affairs, to husband nature, to stand up to exploiters. And it has certainly struck a blow at the money-lender-liquor merchant-contractor-local official-politician combine.

Consider a few examples. Two years ago a sustained campaign, specially by the women of the area, led to the closure of all the 25 liquor-shops in the area.... Contracts for Bagal grass were customarily taken by big forest contractors; they used to engage the tribals to make bean strings and rope out of the grass; the tribals working with their hands used to produce a kilo of rope in a day and get Rs 1 for it; now the contract is taken by a cooperative of the tribals; a simple pedal-operated machine has been introduced and with its help a worker now turns out 3 to 10 kilos of rope a day and in earnings, 8 to 10 a day. In four years, notes the AFC team, the number of families going to money lenders fell by 60 per cent, the number of families indebted to them fell by two-thirds. The number borrowing from money lenders for social obligations fell by two-thirds, the average amount borrowed by each also fell to a third of what had been. The number borrowing for consumption fell to a quarter and the average amount to one-fifth. Money lenders who had been charging 15% to 200% a year as interest, notes the AFC team, were themselves forced to bring down the rates of interest.... The nexus used to capitalise on disputes among the people. Now these are being settled by the communities themselves. In the last year 66 cases were filed against Mahajans who used to grab land and reduce borrowers to bondage through court. All except two were won....

Writing about the need to smash the nexus of exploiters and exploiters, the AFC team writes: "The tribals are hurt them. But actually transforming power relationships on the ground is another. It is a kind of ignite reaction. It is the Ashram's success in doing so is the genesis of the calamity that is being spread about it today and that the press has swallowed and publicised....

Contractors, led by a Mundi liquor merchant, Gayadin Sahu, and Mahajans, the money lenders, were the rulers of this area till the Ashram began its work among the tribals. And they are the ones who used to fix the rates for small industries after local officials and local politicians. MLA's of the area happened to be from the Jona Soneh. It was one of them, one Subedar Prasad Choudhary, who became Minister of State for Small Industries in UP's Janata government) who was put up to write to the U.P. government that the Ashram was harassing the tribals and that it was doing anything productive and that all assistance to it should be stopped....

Little came of his complaint for meanwhile officials of the Central and State governments had been busy in the project and praised it by glowing terms. And in any case, it was thought a bit imprudent for an MLA from the area itself—who, after all, would have to go back to the people for votes—to come out openly and charge an activity which was so popular with the people....

Horses were therefore, switched and another Jan Sangh MLA, a Babu Lal Verma, then Deputy Minister for Area Development and Minister in-charge of Mirzapur district, was put up. He visited the project and then sent a 15 page letter to then Chief Minister. Being strictures against

the Ashram.

This is the communication that the press has now projected as a 'report' and which I have described as idiotic. Its format is simple. Verma takes an annual report of the Ashram, lists work it says has been executed and just asserts that it has not in fact been done. QED. I shall list a few representative assertions from it to show how even an idiotic document can become an instrument for tarnishing good work....

In these areas, says Verma on page 1 of his 'report', it is just a matter of time that women will shed their 'shame'. Now, Verma must have a fertile imagination to get past the clothes of fully clad women and get straight to their flesh....

I could not locate and was not about any accounts of the Ashram, says Verma on page 2. Immediately after this charge, Verma uses two pages to reproduce, item-wise, the sources of income and heads of expenditure of the Ashram....

Page 5: I was informed, he says that the Ashram claimed Rspees fifty lakhs for constructing a bundh and yet when I saw the bundh it seemed to me to be an old bundh and one that the government itself had constructed. Now, the balance sheet of the Ashram upto June 30, 1973 shows that the Ashram spent only Rs 1.63 lakhs and too fifty lakhs on bundhs that too for constructing eight bundhs, not one. The Deputy Minister's allegation was enough to propel an inquiry into the accounts of the Ashram. The inspector was given the balance sheets. Immediately he found the double-entry book keeping to be thumped. I have caught you red-handed. You are making money by showing the same item at two places and charging twice for each item. The person who maintains the Ashram's accounts tries to explain that corresponding entries have to be made on the assets side as well as on the assets side. 'What?', shouted the inspector. 'Are you trying to tell me that the Ashram is a B.Com? You will know what is that when I get all of you thrown into jail'. The books were closed on him and he was shown the door....

Page 8: The 104 villages near the Ashram have jobs only industrial activity nor can find a single educated person. It is claimed that under Bhoodan 4500 acres have been distributed among 1300 landless families. But no one has received any land whatsoever.... Here again what the AFC evaluation report says on these matters: 'The adult literacy programme has benefited 66 per cent of the families.... This has helped to raise the literacy level from 14 per cent to 27 per cent.... The number of people technically trained has greatly increased (as a result of) the job-oriented training given by the Ashram. Cases presented in the appendices... indicate the receipt of Bhoodan lands by almost every small farmer.... As for industrial activity.... This has helped to see the work that is being done to make bean rope to weave blankets, to produce shoes and bags from locally available leather, to produce silk-worms and bricks, to raise alkali-worms....'

Page again: I could not find a village who had benefited from the extension work of the Ashram.... the people do not even know that the Ashram provides improved seeds, livestock etc.... Contrast this with what the Agricultural Finance Corporation's evaluation report says: 'The Ashram's farm of 160 acres is a standing demonstration of the efficacy of complete mechanisation.... The programme for 100 villages had a target of assisting in the purchase of 600 bullocks.... The achievement reported, as on 31.8.1973, 1915 bullocks benefiting 919 families.... This number does not include those farmers who received such assistance from the revolving fund....'

Area under high yielding varieties increased from 15.4 acres to 535.5 acres....

Page 6 yet again: During the 1965-67 droughts the Ashram received food and medicines for distribution. It misused them and thousands perished for want of medicines and food. The relief work of the Ashram is still remembered by the people and often a mother, when asked the age of a child, counts with reference to the 'Kikadi' Kasal the year of the fruit. Nor is there any record in the district reports or anywhere else, of 'thousands' having perished in Sonepur during the droughts....

Page 8: 'A health education and family planning scheme and a hospital have been started, but there is no doctor or medicine and no patient.... The Ashram clinic is run by a Mrs Pagnini. She calls herself an J.D.M.... The person in question, Dr. Pagnini, is a woman who is an Associate Professor at a medical college in Andhra before she and her husband came over to the Ashram. The remark of the Deputy Minister was enough to initiate a police inquiry into her credentials. Are you an MBBS, asked the police inspector when he came. 'I am an MD', said Dr Pagnini. 'That proves you are not an MBBS even on your own admission', shouted the Inspector. He too was shown the door.... In fact, the health training, services and education scheme is a model of what should be done here. Here is what the AFC team found: 'The health programme has helped immensely and as many as 88.35 per cent of the families benefited under this programme.... The tribal population earlier was subjected to a number of diseases and consequently to high mortality rate mainly because of want to proper medical aid, scarcity of food, drinking water, etc. As these facilities were made available to the project families, under this programme it made tremendous gains on the health of the tribals and reduction in mortality rate, simultaneously increasing the longevity of life among the children.... On an average 2000 patients were treated every year by the Ashram's clinic and its five health posts. On an average 130 patients had been referred by each health post to the main clinic and 100 home visits were made by a Health Post worker....'

Page 11: 'While this Ashram has been set up ostensibly to help Adivasis, it is in fact a hot-bed of intrigue and the guise of volunteers conspirators from all over India have been gathered together.... I met one person who told me that he was a resident of Mirzapur and is the son of the Congress-I MP.... This Ashram is out and out a centre for political conspiracies, as if it were a stronghold of some Christian missionary or CIA.... In a letter that he wrote to the Congress-I minister later urging him again to take action against the Ashram, he returned to this refrain: '... Please do look at the detailed list of Adivasis as of May 1973 in which I had shown that this Ashram has been set up by the opposition (then the Congress-I) as a base for foreigners and is today a centre for spreading anarchy....'

In 1976, there was no Congress-I MP from UP, let alone from Mirzapur. Far from the Congress-I setting up the Ashram as a base for the CIA, in 1976 Mrs Gandhi's government had ordered an investigation into his affairs as if his name was associated with the Ashram and all organisations that had anything to do with him were naturally taken by Mrs Gandhi's Government to be bases for foreign agents. Notice also that even when the stronghold of some Christian missionaries or CIA in his 'report', had become in his letter a confirmed base for foreigners....

To substantiate this erudite report, the Deputy Minister appended two annexures. The first was said to be a statement from a resident of the area. The allegations in this statement are even more absurd than those of the Deputy Minister and the resident, it turns out is, from a family of money-lenders and had been employed by the government itself! This second annexure is said to be the text of the conversation of the Deputy Minister with a Dutch lady he found visiting the Ashram. In the conversation she is all praise for the work that is being done. Proof, conclusive proof, says the Deputy Minister, that foreigners have an interest in the Ashram and, to boot, are being brain-washed by the Ashram managers!

'But, forget the report. Did the Ashram receive foreign money or not?'

Indeed, it did. From seven agencies. All contributions were received with the full knowledge of the Central government. Information about each donation was supplied to the Home Secretary of the Central government as required by the Foreign Contributions (Regulation) Act. Aid contributions from each of the seven agencies (three from UK, two from West Germany and one each from Denmark and the Netherlands) which gave funds to this Ashram have also been accepted by PADI, People's Action for Development (India), the government organisation that has been set up to receive and disburse foreign funds to voluntary organisations....

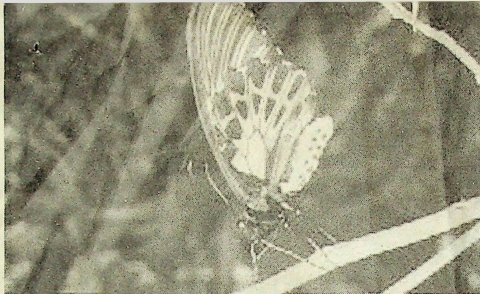
But to get back to Babu Lal Verma. Apart from filing his 'report', he has been publicising his 'facts' at press conferences and the like. At these gatherings he has deemed it appropriate to refer to the Ashram workers as 'gundas', 'dacoits', 'blood-thirsty wolves' and such like. He has even an Ashram worker filed a defamation case against him last year. Verma has been evading the service of summons. Two securities (of Rs. 1500 each) which (two of his friends had furnished to the court) have been forfeited. And now non-bailable warrants have been issued against him....

I asked Nanaji Deshmukh, a leader of the former Jan Sangh, one who himself has considerable experience of constructive work, of its difficulties and its triumphs. I asked him about his assessment of the work of the Banwar Sevā Ashram. He knows it well, he said, and it is outstanding. I asked him about Babu Lal Verma. He knows him well too. But I do not think he would like me to print his assessment of the man's pathological state....

I have gone into all this detail about one man, about his 'report' on the Ashram to show how careless it is for newspapers to just swallow and purvey such material....

All of us know how difficult it is to attract support and help for constructive work in India today. All of us also know that even vast and unsubstantiated slander sticks and can create impediments. Even in the small case of this Ashram, difficulties are by no means over. While I was there last week news came that the Gayadin Sahu, the liquor merchant, had arranged a new dispensation under which the 25 liquor shops are being reopened. And Muni Lal, the forest contractor, had managed to get the local forest officer to recommend that the contract for bagal grass should be once again given to the contractor rather than to the cooperative of tribals. Must we add to the difficulties of good men by our carelessness?

(Continued)



Popularising a concept

For some years now, teak plantation schemes have come a cropper, despite doubts raised about the 'tall claims' made by the plantations on the girth size. Some of the doubts were laid to rest when the Institute of Wood Science and Technology (IWST) found itself selling the 'teak concept'. In and around Bangalore, teak has become a popular species.

When it took up the UNDP project in 1992 in Devanahalli taluk, 30 km from Bangalore

immediate objective to establish a solid research base for increasing tree productivity.

Established in 1938 by the Government of Mysore as a Forest Research Laboratory in Mallewaram and upgraded and named as IWST in 1988, the institute has been doing pioneering work in forestry programmes. It maintains three field stations — a germ plasm bank, a clonal bank and a nursery at Gottipura; progeny trials for control of spike

The Institute of Wood Science and Technology's main aim is to establish a solid research-base for increasing tree productivity, says R. Chandrakanth.

and in Chittoor district of Andhra Pradesh, for transferring technology on improved agro-forestry programmes, farmers pinned for teak seedlings. In the first year of the project, the IWST distributed 47,400 teak seedlings and till date the total seedlings distributed has crossed the one lakh mark in the project area. The farmers are happy that a research institute is endorsing that a well managed teak tree can give 32 to 35 cubic feet of teak in 25 years. And the survival rate of trees here has been 80 per cent, as against the normal rate of 65 to 70 per cent.

Sensing the success rate, more and more families are joining the programme and the number of families covered by it is 660 in Devanahalli and 270 in Chittoor. The five-year project of the UNDP with investment of Rs. 5.5 lakhs is aimed at 'inter alia', tree improvement programme, vegetative propagation, tissue culture, seed technology, bio-fertilizers and tree farm economics. The project areas are being constantly monitored by Messrs. C. R. Rangaswamy, C. R. Sarma, Pankaj Agarwal and D. P. Khali of the IWST. The IWST is supplying teak plants raised from seed collected in Hunsur division in selected seed stands.

With pressure on land and also on forest produce increasing, the IWST has fixed its

claim to host at least 500 sq. m of the species common to South India. Mr. Karthikeyan says.

Studies have led from one thing to another, and butterflies have proved that the reason for their existence goes beyond flitting about from flower to flower in an apparently random manner, doing their bit for propagation. Butterflies, scientists now know, are indicators of the inconsistencies of nature.

Mr. Karthikeyan, who can be counted among the small group of lepidopterists (lepidoptera — scale winged, is the order to which moths and butterflies belong) in the city, says although butterflies are studied chiefly for, well, being butterflies, it has now been established beyond doubt that they have behavioural tendencies unique to them and their study can be as engaging as that of birds.

Butterflies are particular about the plant species which host them. They may be a parasite or a pest on certain plants, but their advantages far outdo their shortcomings as

properties and uses; wood seasoning and preservation; chemistry of forest products and wood bio-degradation and a group on tree improvement are engaged in research activities.

According to its Director, Dr. V. V. Srinivasan, the Institute is working or processing/utilisation of lesser known timber, assessment of wood properties of non-conventional and plantation timbers for their suitability in furniture, handicrafts, packaging, etc.; development of low cost seasoning technology for the small scale timber industry in rural areas; development of indigenous substitutes for imported raw material in perfumery industries; protection of wood under land and marine conditions; utilisation of alternate timbers for catamarans etc. The benefits of these research activities are there to be seen - in Devanahalli and also in the coastal areas where the fisherfolk still use catamarans.

disease at Yelawala near Mysore and three outstation marine centres at Vishakapatnam, Kochi and Goa.

Four divisions under wood science — wood



Teak planting at Harohalla village near Bangalore.

crucial characteristic as the wrong colour of the host plant species could mean the perishing of the larvae.

Loss of habitat is a threat, and if butterflies lose the plant-species they are used to, the chances are they will migrate to the specific region.

In recent years, butterflies have been given a new lease of life, as Bangalore has undertaken to retrieve its once glorious green canopy. The return of the butterflies, or their 'putting off an exodus' is an indication that Bangalore has taken this green signal in the right spirit.