

**MAHARASHTRA
VILLAGE DEVELOPMENT PROJECT**

Status Report

**Maliwada Demonstration Village
24 District Pilot Villages**

Projection

207 Taluka Replication Villages

November 1978

MAHARASHTRA VILLAGE DEVELOPMENT PROJECT

Status Report

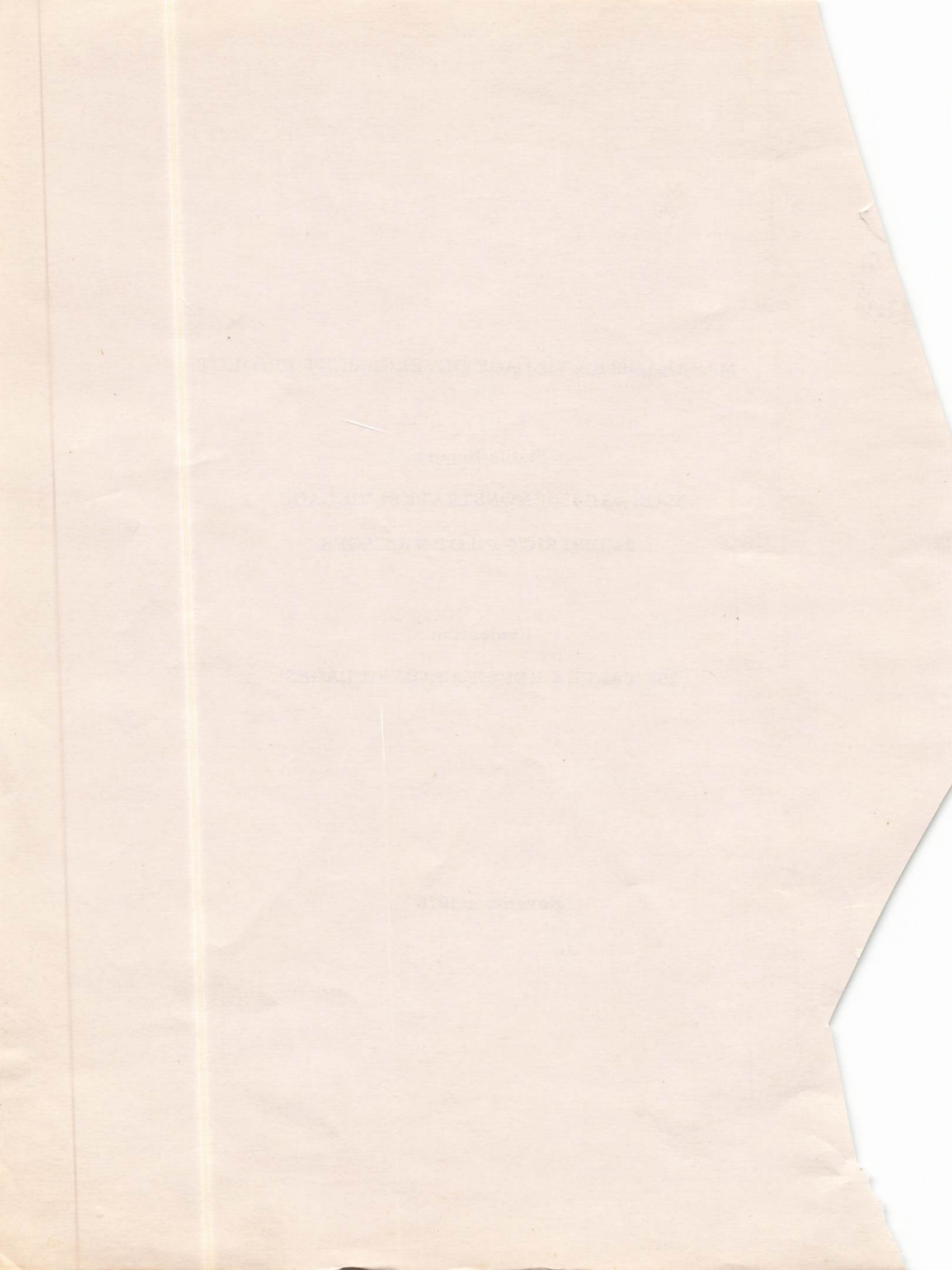
MALIWADA DEMONSTRATION VILLAGE

24 DISTRICT PILOT VILLAGES

Projection

207 TALUKA REPLICATION VILLAGES

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MAHARASHTRA VILLAGE DEVELOPMENT PROJECT

PART ONE: STATUS REPORT

I

INTRODUCTION

Maharashtra, India

India has accomplished an astonishing degree of national industrial self-sufficiency over the past 30 years. In the last decade the nation has turned toward rural and agricultural development in an effort to benefit the vast majority of her sizeable population. Indirectly it's a move to benefit the cities as well since the major pressure in the urban areas is the continual absorption of a rapid migration of thousands of men and women, trained and untrained, from the villages and the regional centres. Statewide comprehensive rural development is in process in the State of Maharashtra. Its 50,000,000 people are organized into 25 districts plus the urban centre of Bombay which is the capital. In each district the Zilla Parishad administers a wide range of development agencies, programmes and schemes under the supervision of a Chief Executive Officer. The districts are divided into tahsils (counties), of which there are 232 across the whole state. The development programme is organized into blocks which often coincide with the tahsils, but some tahsils have more than one block. The Block Development Officer with his staff of expertise-training extension officers is the primary agent of local economic and social development. Through this office, agriculture, industry, education, the gram panchayat, health and the various aspects of village life are presided over to determine their needs and to meet them in every way the government is able. The total number of rural villages in Maharashtra comes to considerably more than 25,000, all of which are to be involved in the Maharashtra Village Development Project.

THE PROGRAMME

Nava Gram Prayas

Nava Gram Prayas, the New Village Effort, is a programme designed to catalyse the development of Maharashtra's villages by the villagers themselves. The emphasis is therefore on training the villagers through demonstration and experience in the methods of economic, social and human development, so that the village becomes self-sufficient, self-reliant and self-confident. Thus, Nava Gram Prayas is based on three inter-connected aims: that villagers learn how to use the resources available within the village, from local private businesses and organisations, and from government schemes; that each villager be in good health and sufficiently well-educated and trained to play a significant role in the community; and that each villager, whether man or woman, of whatever caste or sect and of whatever economic and

political status, has the opportunity to participate in and use his creativity in the corporate development of his community.

The Plan

The programme began in December, 1975, with the launching of the Maliwada Human Development Project. By June, 1978, the 24 District Pilot Projects had been launched, one in each District of the State of Maharashtra. These 25 projects are the demonstration villages around which the whole programme is built. By June, 1979 there will be projects initiated in each taluka, giving a total of 232 project villages. This will complete the initiation of Phase Two of the programme. The original plan called for the escalation of replication into a village-based renewal movement in Phase III which would in its first part involve ten villages around each of the 232. It was anticipated that this would take one year. Part two of Phase III would systematically ensure the spread of the movement's benefits to all villages in the State.

Institute of Cultural Affairs:India

The programme is being initiated by the Institute of Cultural Affairs:India, concerned with the human factor in world development. ICA:India is based in each project village and has central offices in Bombay, Calcutta, Delhi and Hyderabad. The staff is composed predominately of Indian nationals but some staff come from Britain, Canada, Australia, Malaysia, Kenya, USA, Philippines, Belgium, Hong Kong and Zambia to be trained in the methods required for replication and to offer whatever consultant services they can.

Funding

A variety in forms of funding is required for the programme. Most important is the investment of money, labour, goods and services by the villagers themselves in the development of their community. Government participation is channeled through the already available services. Initial capital is required from direct grants by private businesses and organisations.

THE REPORT

Overview

This report is designed to be a summary of the progress of the 25 District villages from their inception up to date, October, 1978. It is a record of the achievements of these villages so far and the investment required to accomplish them. It contains a projection of the mode of operation, the support and servicing, and the funding required to complete Phase II of the programme, the 207 taluka level projects.

Data Sources

The information for this report was gathered during a period of one month in India by a team of two ICA consultants not previously involved in the programme, together with the help of a large number of staff and colleagues of ICA:India. Understanding and cross-checking were enabled by using a variety of sources for the data. These included reports and statistics, both published and in working form; access to the programme's files; interviews with project auxiliaries and the monitoring and co-ordinating teams; and a series of visits to a selection of villages, both to see the described achievements and to talk to villagers themselves. In many cases it was possible to interview village leaders, including the Sarpanch, through Marathi and Hindi translators where necessary. Talks with several agricultural experts from Akola University and a visit to their research areas, together with visits to villages with an engineer from Pune, helped broaden local knowledge.

Basis of the Report

The report has a twofold basis. It is concerned to be an objective factual report of the 25 projects, and contains as much quantifiable data as it was possible to collect for the purpose of documenting their achievements. The report employs many different indicators of overall development of the villages. Thus in addition to the key figures of economic investment, there are figures of villager involvement, health improvement, physical reconstruction, preschool attendance, and so on. It should be noted that although the team has taken great care in the compilation of the data, because of the exigencies of collecting such information, the team recognises that inaccuracies in particular figures are probably present; the team believes that the statistics are good overall indicators of what has happened. Impressive as these statistics are, however, they do not by themselves describe the human factor of the development.

The figure of 10 bank loans taken out for cows by villagers does not show the amount of hard work that was necessary to collect the necessary information on defaulters, land ownership, income and caste, training the villagers as a group to make their applications and visit the bank, obtaining the loan sanction, buying the cows and gaining the cooperation of the bank in working with the villagers in organising repayment. Accordingly, in the narrative describing a number of the projects, apart from the bare factual data, there is included more detail of the work involved, to convey the breadth of the work required in rural development.

In addition to the achievements, a number of programmes begun have not come to fruition as quickly as expected, often due to the need for more capital investment. The realisation by villagers that a project does not mean simply the influx of large funds, but requires their decision to effect the development of their village themselves, with the aid and cooperation of outside bodies, is the essence of human development.

PHASE I: DEMONSTRATION VILLAGE

INTRODUCTION

Selection

In October, 1975, during conversations between Central Government leaders in Delhi and staff members of the Institute of Cultural Affairs: India, the government leaders encouraged the ICA to consider establishing a demonstration village project in rural India. Several states were mentioned as possibilities, among which was Maharashtra. Mr. S. B. Chavan, formerly the Chief Minister of Maharashtra, strongly encouraged the establishment of such a demonstration project in one of the drought-prone regions of the State. The ICA staff set out to choose a suitable location for the pilot project. The criteria used were: first, the socio-economic situation in the initial village needed to typify the under-development of the majority of villages in the state; second, the village needed to be readily accessible to ensure the possibility of maximum exposure to those who would need to see the demonstration; third, the village needed to be in relative proximity to the district seat in order to provide careful and intense liaison with the government structures; and fourth, the village residents needed to be prepared and indeed eager to participate in the reformulation of their village. The site chosen for the demonstration was the village of Maliwada, located at the foot of the ancient Daulatabad Fort, thirteen kilometres from Aurangabad.

Launching

During the month of December, 1975, the village was prepared for the launching. A skeleton staff from the Institute of Cultural Affairs: India moved into the village, lived in quarters provided by the villagers and did the statistical and analytical work necessary for the initiation of the project. During this time, the excitement of the Maliwada people grew enormously. From December 28, 1975 to January 3, 1976, a consultation was held in Maliwada which brought together the experience, wisdom and yearnings of the local residents with the relevant experience and expertise of people gathered from across India and the world. 150 people worked together for one week to create a comprehensive operating plan for the project. The outsiders represented the disciplines of agriculture, medicine, nutrition, education, architecture, construction, business and industry. Through the week's deliberations, villagers began to grasp the possibilities of rapid development of their own village. In the first year, a staff of eighteen persons, twelve nationals and six internationals lived in the village. They represented a catalytic core working side by side with the villagers helping to implement the programmes devised by the consultation team and written in the Maliwada document.

Maliwada, January 1976

As the Maliwada Human Development Project was launched, a local newspaper described the village in this way: "Maliwada is a village 16 kilometres from Aurangabad on the Bombay-Aurangabad Road. Since it is situated at the foot of the historic Deogiri Fortress, one's attention is immediately attracted to the tall pillars of this piece of history, while the little town at its foot remains neglected. Even today it is bypassed and unnoticed and this element of neglect is almost the symbol of Maliwada."

Maliwada means "Abode of the Farmers." Another writer in December 1975 commented, "It was once the farming centre for a flourishing culture of more than 800,000 people on the Deccan Plateau. Today Maliwada and the nearby villages of Abdi Mandi, a commercial centre, and Daulatabad have barely enough food for themselves. No one knows how it happened, but sometime in the shrouded centuries since Mohammed Tughlak captured the Fort by bribery and made the area around it the capital of all India for six years, the people of Maliwada lost use of their ancient water system. Today as the people of Maliwada toil in their barren fields under the shadow of the majestic and glorious fort, they are reminded that their village was once a place of fertility and vitality."

MALIWADA

ECONOMIC DEVELOPMENT

toward self-sufficiency

Before the Project

Maliwada is typically representative of the semi-arid tropics. The annual rainfall, averaging just under 30 inches (725mm), virtually all falls during the monsoon season from mid-June to the end of September. Not only is the total rainfall insufficient for satisfactory crop production, but the fact that it all falls in one season, and often in very heavy downpours, presents serious problems of both soil and water conservation. The village is located at an elevation of just under 1900 in the Deccan Plateau, in part of the Godavari River valley which lies to the south and flows eastward from a range of mountains lying near the coast. Two other seasons include a cool, dry season from October to February and a hot, dry season from March to May.

The soil is of the black cotton type formed by weathering of the trap rock, with considerable clay content, the more productive of the two main soil types found in India. In spite of centuries of cultivation, the potash levels range from adequate to fairly good, but phosphate levels are low. Organic matter and nitrogen levels are very low. Minor nutrient levels are probably low in many cases. Soil depth varies, depending on outcroppings of low rock.

Due to the seasonal rainfall pattern, only irrigated land had produced a crop in more than one season per year. For the most part, Maliwada farmers with irrigation did not have enough water for year-round production, but could get two crops. In addition to food grains and pulses, Maliwada farmers produced some cotton and sugar cane as well as vegetables, flowers, and fruit. The livestock population included a substantial number of goats, as well as some cows and water buffalos which grazed freely. About 200 bullocks provided farm power. Milk production of the local cows was very low, probably averaging two litres a day.

The total population of Maliwada was 1699 of which 32% were men, 28% women and 45% children. These made up 245 families, 70% of which were Hindu, 30% Budhist and Harijan, with three Muslim families. The average family size was six members. 33% of the families lived on farms, while 67% lived in the village proper. Labourers comprised 37% of the population, farmers 48%, private business, trades and services 14% and government service and professional jobs 1%. The village had two blacksmiths, a carpenter, two goldsmiths, two tailors, two barbers, three masons, two auto-rickshaw operators operating in Aurangabad, and one family of washermen. With the market for Maliwada located in Abdi Mandi, most of the residents went there to purchase food and essential clothing. Most

other goods were purchased in Aurangabad. Vegetables and grain produced in Maliwada were taken to Abdi Mundi, Daulatabad and (when in large quantities) to Aurangabad. A number of vendors (kitchenware, garment and jewelry) and repairmen (cobblers, umbrellas, knives, tin platters) came from neighbouring villages occasionally, situating themselves for three or four hours in Nehru Chowk, the central square.

Initial Stages

As the project got underway in early 1976, the community faced an income production level so low that they were unable to generate new capital, and farmer-businessmen with such ineffective business management skills that they could not perceive new possibilities. The first months were spent in practical research, getting farmers and women to work together, making contacts with needed expertise, exploring potential water sources, and working through details on government sanctions and 64 individual bank loans. A detailed survey of every farm holding and its cropping patterns was carried out. New income sources were researched and practical experiments conducted - including the upgrading of guavas for making preserves, making of peanut butter, handbags, and semi-precious stones. A little later a full-time agricultural agent was in residence in the village to assist the farmers. The loan of two tractors, a truck, trailer, compressor, drill and water tanker also enabled farming methods to change. Further experiments were conducted in spice making, papada, tailoring, and poultry as well as cooperative marketing. Those efforts which continued over the next two years and which have had a lasting impact in terms of addressing the economic development of the village follow.

Cooperative Agriculture, Two Years Later

Agricultural production increased significantly from 1976 to 1978, indicating a growing economy. Cultivated land increased from 100 to 600 acres. Such an increase is the result of a variety of factors: water availability, a tractor and new bullock teams, hybrid seed and fertiliser. Increased water availability has occurred with four rebuilt nalla bunds, seven reconstructed wells, twenty-one wells blasted, ten new wells dug and the installation of 25 electric pumps. Three new crops have been introduced. Presently, 40 acres have been given over to sugar cane, yielding a village average of 26 tons per acre. Hybrid jowar has been planted on 450 acres with an average per acre yield of 14 quintals. As an experiment, 10 acres were planted with tobacco, giving returns of over Rs1200 per acre. Increased productivity has been greatly enhanced by the training programmes for the farmers, conducted at the Farmers Training Centre, emphasising improved methods using fertilisers, pesticides, and composting. A second tractor is being purchased by a farmer with the aid of the State Bank of India. A Community Farm, cultivating 42 acres, is sharecropped by six farmers in hybrid jowar, with half of the yield going to the community kitchen. The

dairy cooperative, financed primarily by bank loans, has purchased 54 milk cows which have been artificially inseminated. The State Bank of India has approved 117 additional loans for the purchasing of milk cows. In addition, 26 bullocks and five new bullock carts have been purchased. The number of goats has doubled to over 1000 and the chicken population tripled, while pig breeding for better quality has just begun.

Appropriate Industry

Local industry has been launched in Maliwada. The largest enterprise, the Nutritious Food Processing and Packaging Industry employed 120 people daily. The gross turnover of this enterprise was Rs700,000 which provided Rs90,000 in wages during ten months of operation last year. The Box Factory, employing twenty local people, makes packing crates for factories in Aurangabad, simple household furnishings like shelves and stools. The industry has been expanding to include a timber mill with a newly installed band saw. This operation is serving surrounding villages in addition to Maliwada. The Building Industry last year employed 175 during the rapid building expansion programme, it now has levelled out to support fifty full-time employees. A Carpenter Business, separate from but related to the Building Industry has been started. Ten carpenters are employed. Other new industries include brickmaking which has expanded to three factories employing 15 people, rope weaving which supports two families and a new flour mill has been opened in addition to the one already in existence. A silversmith has opened fulltime in the village, making jewelry. As all these new industries are community-owned and community-serving, it is significant to note that each month the Community Garden provides half the produce for the Community Kitchen and Rs6000 are transferred from the profits of the Industries to support the social programmes of the community.

Commercial Services

One of the signal events in Maliwada was the opening of a branch of the State Bank of India. The villagers presently have 160 accounts. The bank has extended 100 loans for economic ventures coming to approximately two lakhs, ranging from four to eleven percent interest. The bank has made possible the establishment of a variety of businesses. Where previously there were only three tea stalls, there are now seven with a profit margin of ten to twenty-five rupees a day. The village also supports four kirana shops where before there was only one, making trips to Aurangabad unnecessary. A new bakery has started up, guaranteeing a weekly profit of Rs250, and two new paan stores are now operating along with a catering service. A mutton shop just recently opened, butchering four goats each week and realising a profit of Rs300 to Rs400. Other new commercial enterprises include: a bicycle repair shop which also rents ten bicycles, a washing business, a tailoring business which has bought seven sewing machines, and finally a loudspeaker and shamiana rental business which nets Rs300 a month. The bicycle repair and tailoring shops were both started with bank loans.

PROGRAMMATIC INCOME

Programme	Before Consult		1977-78	
AGRICULTURE	Unit	Rs	Unit	Rs
Crops: Jowar	450 acres, 2 multi-crop	3, 00, 000	450 acres, 3 multi-crop (hybrid Jowar)	5, 50, 000
Sugar Cane	-0-	-0-	16	80, 000
Cotton	20	30, 000	20 H4	60, 000
Veg/Fruit/Wheat/Pulse	120	1, 00, 000	100	80, 000
Tobacco	-0-	-0-	10	20, 000
Papaya	-0-	-0-	5	30, 000
Total		4, 30, 000		8, 20, 000
Animals: Buffaloes	5 (milk)	7, 500	20	30, 000
Cows	25 (milk)	15, 000	85	50, 000
Goats & Sheep	200 (milk, mutton)	30, 000	400	60, 000
Chickens	100 (eggs)	2, 000	400	8, 000
Total		54, 500		1, 48, 000
INDUSTRY*				
Mal. Nutritious Food	-0-	-0-		7, 000
Box Factory	-0-	-0-		200
Builders	-0-	-0-		1, 500
Community Kitchen	-0-	-0-		8, 000
Total	-0-	-0-		16, 700
*Contributions to Community Social Programmes from Profits				
PROGRAMME TOTAL		Rs 4, 84, 500		Rs 9, 84, 700

EMPLOYMENT AND WAGES

Occupation	Before Project Initiation		1977 - 1978*	
	# employed	total wages	# employed	total wages
Maliwada Nut. Food	0	0	140	1, 33, 500
Box Factory	0	0	8	14, 000
Agricultural Labourers	75	60, 000	50	40, 000
Construction Workers	3	7, 500	15	20, 000
Brick Factory	0	0	6	6, 000
Carpenters	2	5, 000	15	20, 000
Blacksmiths	3	6, 000	3	6, 000
Flour Millers	2	4, 000	4	10, 000
Rope Makers	1	1, 500	5	6, 000
Baker	0	0	1	1, 500
Barber	2	2, 000	2	2, 000
Butcher	0	0	1	2, 000
Tea Stalls	4	2, 500	12	10, 000
Kirana	2	6, 250	8	27, 500
Tailor	1	1, 500	11	11, 000
Goldsmiths	1	1, 000	1	2, 000
Water Delivery	0	0	4	4, 000
Transport	2	2, 000	13	13, 000
Dhobi	2	1, 000	8	4, 000
Bicycle	0	0	1	1, 000
Public Address System	0	0	1	5, 000
Community Kitchen Caterers	0	0	20	15, 000
<u>Community Paid Workers</u>				
Health Assistant	0	0	1	1, 200
Preschool Teacher	0	0	1	1, 200
Preschool Cooks	0	0	3	2, 100
Village Sweeper	0	0	1	1, 200
<u>Government Paid Workers</u>				
Teachers	4	14, 400	8	28, 800
Post Office	0	0	1	1, 000
WAGES TOTAL	104	1, 14, 650	343	3, 89, 800
TOTAL **		5, 99, 150		13, 74, 500

INCOME PER CAPITA

353

724

INCOME PER FAMILY

2, 080

4, 270

*The employment and wage analysis for 1977-78 represents an average picture for the year, not a picture of peak employment in the life of the project

**Total includes both programmatic and wages amounts.

HUMAN DEVELOPMENT

toward self-confidence

Before the Project

Located in the state of Maharashtra, about 200 miles north-east of Bombay, the village is linked to Aurangabad by State Transport and Aurangabad City buses, as well as by local train services. There were electrical lines to seven farms, but the village was not electrified. The farmland and central village occupy an area of 3.9 square miles. Its northern boundary is the Daulatabad Fort, while the southern boundary goes just beyond the railway line running from Manmad to Aurangabad. To the east lies the farmland of Mitmita village, and the west is bounded by the village of Fatiabad. The village, minus its farmlands occupies an area of .03 square miles located on the northeastern section of the Daulatabad Fort Road that runs into the Aurangabad-Nasik-Bombay Road. The public buildings in the village included a primary school, three temples, a dharamsalla (travellers's shelter) attached to the main temple, a bus stand cum canteen, and the Daulatabad railway station.

There were 150 houses where families lived throughout the year. Sixteen farmers lived on their farms and also had houses in the village where they lived occasionally or rented to other people. The walls of the buildings are built of white stone or brick plastered with clay. Roofing of the majority of the houses was tile and thatch. All houses had mud flooring which was regularly plastered with cow dung. Five houses had partially tiled floors.

Initial Stages

As the planning consultation ended and practical implementation began, villagers found that they had already begun to change one of the deep-seated blocks that had hampered them, a factionalism which had become strongly entrenched as their role as a community had grown ever more dim. Likewise, their lack of cultural exposure had been greatly addressed, and they had begun to see a new role for themselves as a demonstration village. The environment continued to project decay and neglect, but seeing it now with the eyes of the outsiders, there was a great desire to change and improve it. Having created a common plan for their future, villagers were now prepared to approach government, industry, and social groups for assistance in overcoming their limited range of services. They moved immediately and got electricity into the village by January 26, 1976. The community also moved quickly to give permanence to its new-found identity by instigating fortnightly newspapers, a community calendar and bulletin board, preschool uniforms, and a village songbook with newly created songs. To back up the corporate structures they created, a complete village census was conducted and youth were organized into a voluntary workforce of 120. The results of continued efforts to reshape their corporateness during the following two years are given below.

Living Environment, Two Years Later

During the two years since the Human Development Project began, the face of Maliwada has changed remarkably. Following the connection of electricity to the village, thirty-three street lights have been installed and 75 homes connected. A comprehensive village plan was prepared including a community housing design and a plan for new facilities. Eight model homes were built to demonstrate the use of permanent roofing, flooring and walls, lighting and good ventilation. As a result, 32 new private units have been built. The new facilities in the village include the Community Centre, one store, a storage shed, two industrial sheds, a preschool, health clinic, postoffice, community kitchen, and dairy shed. Much attention has been given to improving the streets of the village. They were bulldozed and lined with white boundary markers. A drainage system was constructed along the streets and one street was cobblestoned. As part of the beautification of the village, all the houses were whitewashed and roofs repaired, while trees and flowers have been planted. A village entrance board was erected on the Aurangabad-Nasik highway, while at the heart of the community a plaza has been created and a statue of Dr. Ambedkar erected. Access to Aurangabad has been made easier with three buses daily and the repaired and painted bus stand has added appreciation to the service. In dealing with the contradiction of water supply, a community well was reconstructed and a bore sunk for drinking water.

Corporate Patterns

Corporate Patterns deals with promoting unity and consensus-building in the community. There are several ways in which this has happened in Maliwada. Emphasising total community engagement, one of the ways local residents participate is through the 275 new jobs that have been created. Regular weekly meetings of the task groups, representing the various arenas of employment, the neighbourhood groups, and the leadership hold the consensus together and help in implementing and furthering the programmes of the village. An eleven-member committee, called the Village Association, represents all castes. It is a registered society providing the leadership and direction of the community. Village Funds, pooled from the income-generating programmes in Maliwada are used for health, education, nutrition, sanitation and village beautification. Finally, weekly shramdands have been instrumental in not only establishing community unity, but in accomplishing village beautification.

Identity Systems

Maliwada has very carefully built into its community identity system, symbols which convey the image that this village is on the move. The primary community symbol is styled after the historic Daulatabad fort with the sun rising in the background. Murals of this symbol are painted at strategic points on walls throughout Maliwada. A large entrance sign welcomes visitors. Slogans and banners have been created and placed through-

out the village. The streets and chowks have been named and houses numbered and family name placques created. Village celebrations serving to bring people of several communities together occur regularly with national, religious and cultural festivals. Films and slideshows are shown for both entertainment and education. Community unity is also emphasised by all school age children wearing similar uniforms. The community centre contains a reading room and a radio for use by village residents. In hosting visitors from across India, the citizens of Maliwada continually rehearse the demonstration role of Maliwada.

ENVIRONMENT			ORGANISATION		
PHYSICAL FACILITIES	Before Project Initiation	Currently	COMMUNITY ORGANISATION	Before Project Initiation	Currently
Electricity	7 rural lines	33 street lights 75 house connections	Administration	With Abdi Mandi Older Sarpanch in Abdi Mandi	With Abdi Mandi Young, educated Sar- panch in Maliwada
Busses	none originating in Maliwada	2 originating in Maliwada	Cohesion	Factions pre- venting corpor- ate action	4 Registered Bodies: Village Association Mahila Mandal Youth Mandal Maliw. Novel Industries Weekly Meetings Weekly Shramdans
Housing	Brick & Mud with Thatch & Tile	8 Model Houses 32 New Homes Numerous Tin Roofs & Stone Floors	Community Funds	-0-	4 Village Maintenance Salaries from 2% of profits from village- owned industries
Roads	Mud Paths	1 Cobblestone street 1 Tarmac road All roads levelled & broadened	Identifying Marks	-0-	Entrance Sign Street Signs Programme Signs Village Symbol School Uniforms
Drains	-0-	Along main streets	Nodes	Nehru Chowk	New Chowks Reading room/radio Dr. Ambedkar Plaza
Village Plan	-0-	Master Plan deline- ating new construc- tion	Visitors	Family only	800-1000/year, Gov't, Internat'l, Indus, Vill.
Public Buildings	Primary School Dharamsalla 3 Temples Daulatabad Station	Post Office, Bank Community Complex Preschool, Store 2 Industrial Sheds Health Clinic Dairy Shed, Storage Shed, Com. Kitchen			

SOCIAL DEVELOPMENT

toward self-reliance

Before the Project

Under the State rural health programme, Maliwada falls into the area served by the Phulambui Primary Health Centre. Services under the scheme provide for a clinic in Abdi Mandi, one mile away. This clinic's resident nurse-midwife is on call to Maliwada residents for deliveries. A rural health worker in Abdi Mandi is responsible for 10 villages including Maliwada. His responsibilities include weekly visits to treat public water wells, give vaccinations and inoculations, make house calls, refer patients to the hospital and maintain health records for Maliwada residents.

Medicines have to be procured from Aurangabad - either from private chemists or from the Medical College Hospital. The Aurangabad Medical College Hospital provided in-patient care for the residents of the taluka. The distance and cost of travel from Maliwada discouraged residents from availing themselves of these facilities. There were five living in two neighbouring villages of Daulatabad and Abdi Mandi, whose fees were prohibitive.

Before project initiation, the four major fatal diseases in Maliwada were para-respiratory diseases, dysentery, diarrhoea, pneumonia and tuberculosis. The three most common ailments were ear and eye infections and scabies, a skin parasite. The infant mortality rate was 20%. Domestic water was obtained from six public wells which were open and easily polluted, therefore transmitting parasites. Also drainage and garbage removal systems were non-existent, thus producing standing water and decomposing waste that bred parasites and jeopardized public health.

Educational facilities were limited to one Zilla Parishad Primary School, grades 1 through 4, with four teachers appointed. Children attending school beyond fourth class attended Daulatabad C.P.S. for classes five to seven and Deogiri High School in Daulatabad or Aurangabad for classes eight to ten. For higher education several colleges are located in Aurangabad. However, most students pursuing a higher education did so through private study. One major deterrent to the pursuit of higher education has been that all college level science courses must be studied in English medium.

The average education level of the total adult population of the village was first standard. One fifth of the adult population of the village had attended school. This comprised 33% of the men and 9% of the women. 32% completed primary school and then quit. 7% completed middle school, and 8% matriculated. Although a higher percentage of women completed primary school than men, men significantly outnumbered women at the middle school and matriculation levels.

Initial Stages

The failure to develop and care for the human resources of Maliwada was evident in low school attendance, limited skills and abilities, inadequate nutrition and health care and rigid social traditions which held back castes and women. The project immediately instigated crash programmes to radically alter this situation. At one point 972 persons were tested by doctors in one day. All children were put into educational structures - 162 in preschool and 120 in primary school (necessitating two shifts). Refresher courses were given to teachers, bookkeeping and management skills taught to adults, a five-week crash course was given to children to permit them to re-enter school, 200 adults given training in planning methods, and persons sent for community development and agriculture training. 300 women were given a special women's awakening course, followed by numerous events and activities. Today the vitality and competence of Maliwada's people is something noticed by all visitors. How they have developed and continue to nurture that vitality is given below.

Preventive Care, Two Years Later

Crucial to Maliwada's development has been the implementation of health and sanitation structures. Sixteen public latrines have been built and are used by the villagers. A biogas plant has been installed. The Community Kitchen is supported by funds from the Nutritious Food Industry and by produce from the Community Farm and Community Vegetable Garden. It also supplies lunches for the Infant School and Preschool and conducts training in meal planning and nutrition. The Health Clinic is run on a full-time basis by a locally trained woman assisted by six Health Caretakers. The clinic treats over 40 patients from the village daily. Medical records are kept on all villagers. Vitamins are distributed and systematic inoculations are given regularly. Skin, eye and E.N.T. camps have been held. An emergency link with the hospital in Aurangabad has been established. Clinic staff take patients to the Aurangabad Medical College every Thursday for regular treatment of long-term diseases. Pre-natal and post-natal care is also provided. There has been a favourable response to family planning with 93 persons volunteering for operations, 50% of which were women.

Functional Education

A preschool staffed entirely by village teachers has a daily attendance of over 40. The primary school attendance has increased from 30 to over 150, necessitating two shifts a day. Marathi, Hindi and English literacy programmes are conducted daily. Adult training has included tractor driving, vehicle maintenance, farm management, new farm methods, carpentry and masonry. Technical skills are shared in all aspects of the project to enable village self-reliance. Over 50 Maliwada citizens have attended the Maharashtra Human Development Training Institute and fifteen are now serving in other villages. Maliwada residents have been trained to conduct the Village Meetings held in neighbouring villages as part of the statewide replication scheme.

Community Welfare

The Mahila Mandal Association has encouraged the women to participate in all aspects of the village's development. Courses in menu planning, household budgeting and basic sanitation have been conducted. Local women run the infant school comprised of 32 infants from six months to two years of age; the main emphasis of the school is on proper nutrition and hygiene. Several short-term training courses and demonstrations related to domestic sciences and health and vocational skills, such as chalk, incense and soap-making, have been well-attended by the women. Classes in sewing, paper flower-making and bag weaving have also been offered. Encouraged by their participation, several women have started commercial enterprises such as spice grinding, papad making and seedbag and garment stitching. The women hold regular meetings and have taken part in meetings with women of other villages. Village bhajans, plays and rituals have been instrumental in engaging elders and youth in community life. The youth in particular have emerged as strong leaders and actively seek to expand the development of their village through effective implementation of all the programmes.

MALIWADA HUMAN DEVELOPMENT PROJECT
SOCIAL DEVELOPMENT

PREVENTATIVE HEALTH *			FUNCTIONAL EDUCATION *		
Vital Statistics	Before Project Initiation	Currently	Participation	Before Project Initiation	Currently
Population	1,699	1,898	Preschool Teachers	4	8
Births per annum	not available	44	Infant School	0	32
Deaths per annum	not available	9	Preschool	0	40
Instances of Malnutrition	50% of Children	2-3	Primary School	30	150
Health Clinic Patients per day	0	40	University Attendance	2-3	11-12
Number of Latrines	0	16	Human Development Training Institute	0	50
Common Diseases	ear/eye infections scabies diarrhea	stomach disorders	Nutrition Classes	0	50-60
Availability of Medicine	Aurangabad Medical College Hospital	Local Health Clinic	Farmer Training	0	130
Rural Health Worker Area	10 villages	Maliwada	Business Management Trng.	0	9
*Partial Listing Only			Vehicle Maintenance Trng.	0	9
			Other Skills Training	0	12
			Literacy Classes	0	70
			English Classes	0	40
			Weekly Leadership Trng.	0	30
			Youth Programmes	0	120

Future Directions

As Maliwada looks to the future, there are many things the villagers still wish to achieve. Primary amongst them is actuation of a lift irrigation scheme designed by Kirloskar Consultants. The scheme costs approximately Rs5 lakhs and will be undertaken on a loan basis. Second is the continual expansion of their economic base. Their dream is that Maliwada become a nucleus of multi-village industries catering to the surrounding villages in order to demonstrate that villages are capable of being self-sufficient. The Village Association is actively searching for a small plastic bag operation. Third is the installation of a drinking water system with neighbourhood taps, costing about Rs2 lakhs. And of course, they want to continue to develop their roads and drains and further beautify their village.

Showpiece

Maliwada is a 'showpiece'. Although there is still much to be done in Maliwada, it is currently fulfilling its demonstration function. This function is many-sided. Rapid social change is first of all proven possible by the village of Maliwada. The villages of the State and the Nation are ready, even eager for comprehensive change. In addition, the demonstration village serves as a laboratory where methods can be refined for mass replication in phases II and III of the state-wide project. Also, Maliwada serves as a training centre where both local leaders and other villagers can be trained in the methods used in instigating change. Finally, the village of Maliwada itself provides local change agents for other villages in the state-wide project, helping them to begin the process of development.

Maliwada's Leaders

What's going to happen to Maliwada when the project's over and the ICA staff leave? This is a question frequently asked.

In December 1977, on the second anniversary of the beginning of the Maliwada Human Development Project, the project was officially handed over to the village leadership. ICA staff at that time became the shadows of these village leaders. In October 1978, in anticipation of the completion of the project in December, all outside auxiliary staff were removed from the project and the Village Association picked up complete responsibility. During these three months, the project will be monitored through villagers' presence in bi-weekly district meetings, bi-weekly monitoring visits in the village by an outside team, and quarterly participation by that outside team in the Village Association's quarterly planning.

An objective visitor to Maliwada was struck by witnessing a weekly meeting of the Village Association. Afterward he visited three of the leaders and wrote the following profiles. It is when one encounters people like those described here that the question of Maliwada's future ceases to be asked.

Pundlik Dhangare and the Village Association

Friday evening in Maliwada is the occasion of the village leaders meeting. Once a month this meeting is expanded to a full community assembly. Such was the case on the first Friday in October 1978, when some 90 people, including nine women, packed into the community hall.

The meeting was opened with two songs in Marathi to Indian tunes and one in English. The evening's leader, Narayan Muley, recited, "The villages of India are on the move," to which the community assembled replied, "Maliwada is the sign." Narayan then called for the accomplishments of the past week, and wrote them on the board as members of the six guilds (task groups) called them out. The two most important were selected for inclusion in the Nava Gram Prayas newsletter. The board was cleared and tasks and issues were listed for the coming week. Each task was placed on a chart showing which day. Remaining issues were discussed and a decision reached. One issue which caused lively debate was the kitchen contract for the Training School. All groups contributed, including the women. Two decisions were reached; one was to appoint a representative group to work the next day on setting criteria for choosing which group would gain the contract for the next session of the school; the second was to have the Village Association check that the women were paid equal wages with the men under this contract. The meeting closed with a song and ritual.

The Village Association acts as a secretariat to the community, and co-ordinates the common finances. It was formed in March 1978 and was registered in October when it received a certificate and registration number. The symbolic leadership resides with the Gram Panchayat which Maliwada shares with a village one mile away called Abdi Mandi. This year for the first time the Sarpanch is a young man from Maliwada.

The eleven members of the Association are from all castes of the village, and representative of the various groups and interests in the community. An important post is that of treasurer, which is held by Pundlik Dhangare. He is a quiet, confident man who has a moderate command of English and possesses several skills. His primary occupation is farming, his income from this source has been more than doubled since the consult because he now plants two crops a year, hybrid jowar and dahl. In addition, Pundlik combines carpentry with blacksmithing to make farm tools and implements. His anvil is kept in the shop two doors from his home. The wooden sections of the tools he makes at the woodcutting shop, where there are two electric saws, one a circular band saw. Pundlik's home has two rooms; the shelves in his front room are filled with the Association's financial files. He sits at a simple wooden stool and desk to keep the books in neat Marathi figures and letters.

Pundlik records monthly the income to the Association and its expenditure. (See the simplified table on the next page.) All employees of community projects receive a common wage of Rs105 per month, of which Rs5 goes to the

to the Village Association. This year there is a further income of Rs700 from the rental of the demonstration garden which one family farms. This is a change from the previous year when the Association paid a gardener to look after the plots, which turned out to be unprofitable.

The Association pays the wages of the health clinic nurse, the road sweeper, the preschool teacher, and two cooks for the preschool. It pays for nutritious food for the preschool children and makes small loans to businesses. In addition, the Association is building a new preschool at a cost of Rs10,000; it requires a roof and equipment for completion. A major project this year is the construction of a new temple.

The formation of the Village Association has allowed villagers to manage their own community finances, and to have a body accountable to the village for the collection and expenditure of the community funds used for social and economic programmes.

Here is a simplified version of Pundlik's records:

VILLAGE ASSOCIATION: INCOME & EXPENDITURE MONTHLY	
Expenditure	Income
Regular wages Rs600 e. g. health nurse preschool teacher road sweeper etc.	Regular Rental - Sukhdi Factory Rs400 Bank 450 Tractor 210* Wages Contribution 12 people @ Rs5 60
Variable: plus community project expenses of building contracts.	Variable: plus income from building contracts.
* this year - from loan of tractor replaced by farmer-owned tractor.	

Rukmini Bai and the Health Clinic

Rukmini Bai is Pundlik Dhangare's wife. Much of the day she can be found in the central Nehru Chowk, for on one side is the Health Clinic for which she is responsible. She has a ready smile and is a friendly and very capable woman. Before the project she was hardly literate, having received an education only up to the fourth standard. Now she is able to write and keeps a health record card for each person in the village. pink for men, green for women and white for children. She keeps a log of all births and deaths in the village, a task which had not been done before.

When the clinic was first opened in the early months of the Project, it was set up two doors away where the post office is currently located. The present clinic is a complete renovation of a dilapidated shed in which donkeys used to sleep. It has been transformed into a clean sick room and dispensary. The sick room has an adjustable bed and holds the health records, and a basic supply of medicines and vitamins, mostly donated by medical and pharmaceutical suppliers. The walls of the clinic have posters explaining health care and family planning. The latter has been favourably received by villagers, with 93 people, half of them women, volunteering for operations, while others practice birth control.

Rural social and economic development relies on a base of physical well-being. This requires more than curative medicines, but a comprehensive programme of preventive and curative measures. With the assistance of a medical student from the village, Rukmini Bai is responsible for overseeing health in Maliwada. The clinic is open daily for minor ailments such as coughs, colds, stomach troubles and pregnancy-related illnesses. Rukmini visits the hospital with patients once a week, although she will accompany an emergency case at any time. She trains those who have to visit the hospital regularly to make the visits by themselves. An immunization programme held early in the project eradicated infectious diseases. This was supported by an emphasis on cleanliness and sanitation, with the building of drains and toilets and the clearing of waste and marshy ground. Many villagers used to have TB, now only three people have the disease and they are receiving hospital treatment.

On the preventive side of health care, an important improvement has been made in nutrition. Rukmini Bai has held three nutrition classes for 15-20 women in which she has told the village women about the need for kitchen hygiene and proper sanitation and about the body's requirement for all five classes of food. This education has been supported by the increased availability of vegetables from the community garden. The teaching is spread throughout the village by the women who have attended the classes talking and demonstrating what they have learned to their neighbours. As a result, malnutrition, which used to affect half of the village children, is now down to 2-3%.

Narayan Muley and the Sukhdi Factory

The secretary of the Village Association is a vivacious, handsome and self-confident young man named Narayan Muley. Narayan is the driving force of Maliwada's major economic development. Before the consult, he worked in the Gram Panchayat office for Rs50 per month. After the project began, he obtained a Rs200 loan from the project which he used to set up a successful small hardware shop in Maliwada. He then took the first Human Development Training Institute course and taught in the second and third sessions on a part-time basis. Narayan has worked in the Nutritious Food Factory since July 1976 when Maliwada received the government contract for supplying sukhdi to the primary schools of Aurangabad and Jalgaon districts. Sukhdi is a protein rich compound (13% protein) of 20% Jagare, 60% suji and 14% soya. Each 100 gram packet has 400 calories and sells at 27 paise per packet.

The Maliwada Nutritious Food Company was formed to make the Sukhdi. A factory was erected at a cost of Rs65,000. The company took a bank loan of Rs50,000 to buy raw materials, taking normal credit from the suppliers. Narayan and several others were trained in the tasks necessary to run the industry by an experienced entrepreneur. Mr. Balm would hold training sessions for them and took one of them with him each time he went on a visit to do with the business. Out of this training, nine young men emerged as the managers and supervisors of the factory.

The nine partners of the industry include six factory supervisors, two distribution managers, and Narayan, the purchasing and general manager. In the two years for which the business has had the government contract, it has turned over Rs7 lakhs each year. The factory runs 24 days per month for the 10 months when the schools are open. There are three shifts per day, each employing 40 people, with two supervisors on each shift; this produces 11,000 packets of sukhdi per day. Each day at 8 am Narayan leads his partners in a planning session working out the tasks of the day and making assignments to carry them out. A second meeting at 8 pm is on evaluation of the day, giving a chance to talk through any problems encountered. Workers in the factory are paid Rs72 per month, distributors Rs120 per month and a supervisor earns Rs350 per month.

Narayan carries out all the necessary visits with suppliers and the government officials responsible for the school nutrition contract. At present he is negotiating with a Bombay firm to gain a contract for making plastic bags as a way of expanding Maliwada's economic base. The essence of any economic enterprise in Maliwada is to increase the income of the village and make available jobs for the unemployed. It took the first year for the partners of the sukhdi factory to gain the necessary training and experience; but in the second year, the industry was able to repay half its loan and to support community programmes through rent on the factory. Rs20,000 was used to purchase a small Matador bus for distribution. In addition, the profits of the factory paid for the volleyball equipment for the village and the Training Institute and a contribution of Rs500 was made to a charitable organisation.

Maharashtra
Village
Development
Project

MALIWADA INVESTMENT
(December 1975 - October, 1978)

October 1978

Indian Rupees

PRIVATE INVESTMENT

GOVERNMENT INPUT

VILLAGER INVESTMENT

<u>Programme</u>	<u>Amount</u>
Agriculture	30,000
Irrigation	10,000
Roads & Buildings	2,01,000
Health	36,000
Small Industry	48,000
Education	42,000
Social Welfare	70,000
Project Initiation	18,000
Total	4,55,000

Inkind Donations

Tractor
Implements
Jeep
Truck
Well Blasting Equipment
Compressor
Water Tanker
Medicine
Street Lights
Slide Show
Building Materials

Electrification
2 Bore Wells
3 Nalla Bunds
Health Camp
Bus Service
2 Harijan Houses
135 Acres of Land to
Landless
Labourers
4 Additional Primary
Teachers
1 2km Pucca Road
Farmers' Training
Camp
33% Subsidy on 68
Cows
Extension Services

<u>Loans</u>	
40 Goats	8,000
3 Well Construction	11,000
20 Electric Pumps	64,000
15 Buffaloes	30,000
60 Cows	75,000
13 Bullock Pairs	13,000
1 Tractor	95,000
1 Maliwada Nut. Food Fact.	50,000
3 Brick Factories	1,200
1 Mini Truck	50,000
4 Tea Stands	2,000
3 Kirana Shops	13,000
11 Sewing Machines	6,600
1 Cycle Repair shop	300
5 Bullock Carts	10,000
1 Fair Price Shop	1,000
10 Fruit Vendors	10,000
1 Pan Stall	150
1 Dhobi	300
1 Gobar Gas	1,800
1 Labour Society	5,000
Total	4,48,350

Donations:

Paid to the Village Association by
Residents & Businesses of Maliwada
23,863

Invested: Evidenced in Construction &/or
Renovation of Houses
1,74,000

PHASE II: REPLICATION MODEL

INTRODUCTION

The Concept

The rapid progress of the Maliwada residents and people living in the surrounding villages persuaded the Institute of Cultural Affairs to initiate phase II of the Maharashtra project. Phase II involved refining the model for later mass replication and the building of the state-wide network. For replication to be effective, it must be systematic from the start. That is, replication must engage all the districts at once. It is not programmatic replication, but the systematic initiation of locally planned projects across the whole state. It is this rational and rapid move that generates the enthusiasm and momentum necessary for the mass effort.

As indicated above, part I of Phase II involved the selection of one village in each of the other 24 districts in the State as a whole (Maliwada representing the district project for Aurangabad district). Each of the villages was selected in consultation with the government of Maharashtra at the district level. Since the 25 district pilot villages are demonstrations, other villagers come from across the district to visit them. These twenty-five pilot villages will become the foci around which the state network of replication villages will be built.

Evaluation of the 24 District Projects

Outside of Maliwada, none of the other twenty-four district projects has completed its two year initiation or three year completion phases and therefore full analysis and evaluation are not warranted. Reports on progress to date can, however, be given. For purposes of this report, fuller descriptions are being given on eight projects where data is more available. In reading the descriptions of accomplishments in the other twenty-four projects, generally speaking, those in existence longer have shown more signs of development, with the notable exception of Sevagram, where an initial injection of capital and more experienced staff has enabled immediate actuation. Three of the district projects have begun to play catalytic roles similar to that of Maliwada; fairly full descriptions of these projects are given. Another five which have given evidence that they will play significant roles in the near future have also been more fully described.

Emerging Patterns

Some patterns have begun to emerge but it is still too early to determine their validity. Generally the larger more developed villages seem to be more difficult to motivate quickly and require greater capital injection to produce visible change and thus create a change-oriented mindset. Similarly villages which had achieved a level of sophistication in agricultural techniques and government services before the project began, require greater inputs. These villages need depth economic development, which is the most difficult arena in which to succeed in the early stages of the project. Smaller villages with higher numbers of tribal or backward classes are more eager to undertake development. They seem to require smaller injections of capital in order to get momentum toward development started.

Nevertheless, as the Maharashtra Project looks ahead to Phase III: 2500 villages, it is clear that the larger, more developed villages will be essential to the creation of the economic networks linking the villages. Therefore, the distinction between the Three Catalytic Villages and the Five Future Network Villages is one of function within time. The Three Catalytic Villages are important to the immediate creation of momentum across the State. The Five Future Network Villages are important as a base around which to develop the future network of villages. As the sixteen Developmentally Awakened Villages progress, they will play these and other yet to be discovered roles.

THREE CATALYTIC VILLAGES

The evaluation team found the following three projects to be playing a catalytic role similar to that of Maliwada. They were initiated at different times; one has nearly completed its two year initiation phase, one is 14 months along, and one is just five months old. They have each begun to visibly reflect comprehensive development and self-generating change. All three have had an injection of capital of at least Rs75,000, either from an industrial house, government sanctions, or through the village taking out loans. These projects have local leaders who are taking responsibility beyond simply their own village. Villagers from around these villages have begun to evidence excitement about rural development and to regularly send their youth to the Human Development Training Institute to become staff in village projects.

In reading the 24 project reports, it will be noted that other projects, particularly in the set of five network villages, have had more work and sometimes more capital, put into them. Yet they are not at present playing as catalytic a role in the Maharashtra Project as the three selected. Through the experience with projects one year to 2 years in operation, the ICA staff began to discover the patterns described previously (Emerging Patterns). As capital becomes more available it will be possible to develop refined criteria regarding the catalytic injection of funds into a village.

VAVIHARSH HUMAN DEVELOPMENT PROJECT

Initiated December 1976

Baseline Description

Vaviharsh is a village of 800 people, the majority of whom are tribal, whilst the rest are a sprinkling of other castes and Harijans. The village covers 700 acres of a peninsula jutting into Lake Vaitana, an artificial lake dammed to provide drinking water for Bombay and electricity to the region. The lake and village are surrounded by mountains, one of which is topped by a huge natural fortress with sheer walls chisled from the rock. At the time of the planning consultation for the Vaviharsh Project, most of the 226 working men in the village were farmers and labourers. There was an obvious need for upgrading the farming as the main income-producing activity of the village. A number of contradictions stood in the path. Chief of these was the unwillingness of the farmers to come to a consensus about what was required. Technical skills and even basic tools were missing, so that the farmers did not know how to increase the productivity of their land. In addition, until the consult, there was no incentive to change from the traditional subsistence farming patterns. So the key in agriculture was seen to be developing a co-operative approach among the farmers. Enabling them to trust new methods and to experiment with new crops and livestock, and training them to make use of the available advice and services.

Agro-industry

The village farmland is rocky and undulating and difficult to work. 1/2 acre of land was procured for the village vegetable garden; it was ploughed, drained and fenced corporately. Expert advice was obtained on soil preparation and intensive vegetable farming. Seeds were bought from the profits of the Vaviharsh Vyaparigat (see below). 24 white longhorn cocks replaced daiyi cocks as part of the Western Ghats Poultry Improvement Scheme. In addition, the farmers acquired various garden and construction implements, hybrid jowar seeds, 60 mango plants. Subsidized fertiliser for the hill millet increased the yield by 50%.

The farmers cooperative was begun to explore the possibility of introducing a cash crop. After negotiation with Industrial Perfumes Ltd. of Bombay, they decided to experiment with 2 acres of Citronella, a hardy grass, cultivable for its oil which has a highly perfumed lemon scent. The oil is used for perfumes, medicines and scent. The grass can grow in poor and rocky soils and so is ideal for Vaviharsh. The farmers found that one acre of Citronella, if watered regularly and given fertilizer could be harvested every two months to give six or more litres of oil, worth Rs70 per litre. The yield could be improved with better irrigation. These results indicated that the plot should be expanded. In order to set the enterprise on its feet, Industrial Perfumes donated a small processing plant (see diagram) which was set up by a

by a large tree overlooking the plot. Industrial Perfumes decided to set aside 1.5 lakhs as a rotating fund to pay the rental of the land, hire the labourers and to pay for the seedlings. The plot was expanded to four acres and the wood-fired processing plant was built to ensure a high concentration of oil in the distilled liquid. In the first six months two crops were sold.

After the monsoon of 1978, five farmers joined together to form the Vaviharsh Arthic Vikas Sangh - Economic Development Corporation - which signed a contract with Industrial Perfumes to provide citronella oil. Of these five, three owned the land on which citronella was being grown, and two were landless labourers. This society now employs six full time on the plot which is expanded to 17 acres. These labourers earn Rs4 per day and are employed in weeding, fertilising, and supervising the irrigation and cutting the crop. The plant is such that it produces more leaves after each harvest. Irrigation is currently by means of a single diesel engine pumping water from the lake. The single pump will be insufficient when the plot is expanded next year to 50 acres, so the company has undertaken to provide six electric pumps.

Permission to use water from the lake was granted by the State Irrigation Department in August, 1978 after application by the villagers. Apart from the citronella, this will provide irrigation for other farming. A number of farmers who had been saving during the period of application have decided to buy pumps immediately, rather than to wait a further year for sanction under a government scheme for irrigation in tribal areas.

During the early part of 1978 a fine industrial shed was built in the village using local materials except for the windows, doors and frames and the corrugated Asbestos roof. The shed is to be used partly for storage for the citronella industry and partly to house a new cottage industry venture. There is a seasonal women's papad industry.

Commercial Services

The money for seeds and equipment for the farmers was provided from the profits of the Vaviharsh Vyaparigat Association - a traders group of five people registered as a bank association. They traded with rice and cereal bought at bulk and sold at a nearby town and made a Rs7000 profit. The rest of the profit was spent on social programmes. Other commercial achievements were the acquisition of a sewing machine and tailoring contract for factory caps and the opening of a Post Office, and the sanctioning of bank loans for crops, animals and machines. There are now 14 new cows in the village and eight people have loans for 50% subsidised bullock pairs.

Living Environment

Vaviharsh is not a wealthy village. One of the ways this can be seen is from the housing; most of the 125 dwellings are single-story and are constructed from slender sticks woven together and caked with a mixture of mud and cow dung. Roofing is of tile or grass and leaves. There are five buildings which are two storey. Wood fuel is used for cooking which is done on the floor inside each house. The community centre is newly built and is one storey.

At the time of the consult there was no electricity. A small generator was procured for the early months, whilst research was made into connection with the Maharashtra State Electricity Board grid. After 18 months, electrification was secured. One villager opened a rice-grinding mill using the new electricity.

A dramatic amount of construction and beautification has been accomplished through shramdan and through a construction workforce paid by the profits of the Vaviharsh Vayaparigat. This began with the construction of a 300' drained, cobbled road to a Roman design of the third century using local materials. The centre chowk was levelled and a tree ring built. A wall was built to support the bank along the main road, and a second wall built in another section of the village. A community centre was built and is now used as the preschool building. 'Teachers Quarters' were financed by the government. Street signs and village entrance signs have been erected. 1150 trees have been planted along the road.

Corporate Patterns

The various activities in Vaviharsh are co-ordinated through three task forces, farmers, business and social; each with seven members on the roll book who attend regularly, with other villagers who come to most of the meetings. There are neighbourhood meetings of about twenty which happen irregularly. Village leaders, including the sarpanch, landed villagers and a Harijan meet as required to discuss village issues.

Identity Systems

The connection of electricity to the village was the occasion of an enthusiastic village celebration which lasted for a full week with drama and singing each day. The village has a folk mandal which plays and sings old religious songs at special celebrations.

Preventive Care

At the time of the initiating consult, there were no health facilities in the village, and the nearest hospitals were at Nasik, 80 kilometres away, and at Goti, 39 kilometres away. A health outpost was set up immediately with treatment available twice a day for common ailments such as scabies malnutrition and wounds. Serious cases were sent to the doctor in Vaitarna. A general health camp and survey was organised by Giants International of Nasik. Triple Antigen and polio vaccinations were carried out. The

houses of the village were numbered and a record system for patients kept in operation. A further eye camp was held and 7 villagers were given glasses. Within a year, 75% of the scabies had been eradicated and baby weighing was instituted. A government health nurse has been assigned but is not yet resident. 500 people attended four Health Education meetings.

Before the consult, the village grew vegetables only during the rainy season. The 3½ acre vegetable garden demonstrated that vegetables could also be grown during the dry season and this encouraged villagers to grow year-round vegetables.

Functional Education

Before the consult, some 72 children attended the primary school. The school now has 40 children in each of 4 classes: this represents half of the children of school age. There are 50 children in the preschool who have their midday meal provided. Uniforms and equipment were provided by the Nasik Rotary and the Zilla Parishad. The preschool visited the hydro-electric station nearby. There have been adult literacy classes in Marathi and a survey is now being conducted in preparation for government adult education. Farmers have received varied agricultural training.

Corporate Welfare

One of the significant signs of change in the village has been the increase in women's participation in leaders, neighbourhood and task force meetings. At the time of the consult, they either would not attend, or would stand quietly and watch. Now they will sit down in the same room as the men and are gaining confidence to speak openly.

Future Directions

The next stage of the project will be improving irrigation, expanding the citronella acreage and training in processing, further upgrading the farming, starting a dairy society, and introducing further cottage industries, improving food purchasing facilities, refurbishing houses and building new dwellings, continuing beautification, extending street lighting, and bringing lights into domestic homes, eradicating fleas, getting a health officer resident, and continuing to train leadership.

NANDAPUR HUMAN DEVELOPMENT PROJECT

Initiated June, 1977

Baseline Description

The project area cover 2043 acres of land, out of which approximately 2000 acres is used for agricultural farming. Sixty wells and 42 motor pumps supply irrigation facilities to 150 acres of land. While the majority of the people own small plots between two and five acres, a low percentage, about 5%, own above 30 acres, though most of this land lies in neighbouring villages. The major crops are bananas which are exported to nearby cities. Jowar, wheat, cotton, onions, dhal, and groundnuts are also raised. There were nearly 200 residential dwellings at the time of the consult. Most of those dwellings are constructed out of mud, while a few are made of bricks and concrete. Nandapur is served by a school which offers education through seven classes. Public facilities include two temples and one mosque. The village had nine kirana shops, seven cobblers, four tailors and two flour mills, electrically operated, at the time the project began. The nearest medical facility is thirteen kilometers away in Parbhani. Though the health of the people is generally good, there have been a few cases of night blindness and a high percentage of children had not been immunised before June, 1977. At the time of the consult there were nine bore wells and two community open wells producing community drinking water. The population of the village was approximately 1200 people at the time of the consult.

THE ACCOMPLISHMENTS

Cooperative Agriculture

Before the Human Development Consult in June, 1977, the village of Nandapur contained 800 cultivated acres of bananas, wheat, jowar, cotton and groundnuts, along with approximately 1000 animals. Within three months of project initiation, fifty community gardens were planted, and after nine months, a five-acre demonstration plot was planted with hybrid seed under the direction of a nearby agricultural university which made site visits to conduct crop seminars with the village farmers. One acre of kubula fodder was planted in anticipation of the arrival of 30 buffaloes for which the State Bank of Hyderabad sanctioned loans with a partial subsidy from the SFDA governmental agency. After one year of actuation, eight acres of papaya had been planted, four acres owned by the community and four by individuals in association with a scheme devised by private companies who will purchase the latex produced by the trees. By August 1978, the fifty gardens planted earlier had expanded to 115 vegetable gardens and second loans had been granted to four of the 36 landless labourers who received the initial buffaloes. These men are now in the process of registering themselves as a dairy society and are marketing

100 liters of milk per day. Recently a groundwater survey was made for new wells which will give a possibility for 20 farmers to obtain well loans for enlarging crop production through irrigation. Nine additional loans were also granted to small farmers for expanding their crop production.

Appropriate Industry/Commercial Services

Aside from the dairy industry, few advances have been made in the industrial and commercial life of Nandapur beyond that in the village prior to the project. Women of the village have expressed interest in initiating a chilli industry and plans are currently underway to secure a grinding mill and chilli market outside the village. Two sewing machines have also been sanctioned in anticipation of starting a small sewing industry. The adoption of Nandapur by the State Bank of Hyderabad has resulted in the sanctioning of nearly 50 loans, of which 72,000Rs were sanctioned in buffalo loans.

Living Environment

Several significant advances have been made in the physical environment of Nandapur. A two-furlong approach road worth Rs10,000 has been constructed leading from the main highway into Nandapur. At the entrance way to the village, a 20 foot by eight foot map of the village with a welcome message has been erected. Whereas there was no electricity in the school, the school is now electrified through local villagers donating Rs400 for that project. In a village of nearly 200 houses, the landless people lived together, eight to nine to a room. Now construction is underway for 20 new houses for these landless people, under the sponsorship of the Zilla Parishad. In addition, eight Harijan houses have been repaired by the Zilla Parishad for a value of approximately Rs750 per house. The 150 trees and 150 flowering plants planted along the approach road also create a highly visible impact.

Corporate Patterns

To demonstrate commitment to the programmes outlined in the consult, Nandapur residents have organised themselves into five taskforces: teachers, doctors, farmers, traders, and builders. The taskforces meet weekly with an average of ten people regularly attending each group. Like many villages, Nandapur described itself, during the consult, as having "no unifying structure" to make plans for the future or to deal with current issues. Since the consult, villagers have organised themselves into weekly shramdands for cleaning various areas of the village. Nearly 25 people, including the Sarpanch, also meet regularly to make plans for Nandapur. In addition, the Sarpanch travels to other nearby villages with the Nava Gram Prayas staff to assist in the development of other villages in the district. Shortly after the consult, a visit was paid by the project staff to the Zilla Parishad for the purpose of securing support for various aspects of the project. At that time the Chief Executive Officer requested

that all heads of departments of the Zilla Parishad should associate "by all means with this work" and that the director of the project should put forth requirements for the different fields of the work. The accomplishments described in this report are largely attributable to the cooperation of the Zilla Parishad.

Identity Systems

To demonstrate the fact that new life has come into Nandapur, a map of the village was painted on the temple wall, a large welcome sign was posted at the entrance to the village and street names were given to all village pathways.

Preventive Care

Before June, 1977, the nearest medical facility to Nandapur was thirteen kilometers away in Parbhani. Now, a nurse comes into the village six days a week to run the new health outpost. In addition, a government doctor visits the village one day each week using the medicine supplied by the government. All children have been immunized and over 300 residents attended a one-day health education session. In terms of sanitation, three public latrines were constructed with cement floors, brick walls and tile roofs. A third new bore well was drilled and 400' of drains have been sanctioned. In the arena of nutrition, the Block Development Officer distributed vegetable seeds to 115 households for kitchen gardens.

Functional Education

During the preparation week for the Nandapur consult, it was discovered that 35% of the adult population had achieved literacy. At the consult itself, during the identification of village contradictions, the participants named the absence of adult education structures to be one of the most critical issues. To meet this need, a literacy class with forty people in attendance began in the first year of actuation. A vocational skills class was also established, and, as promised by the Chief Executive Officer, a science teacher and equipment were sanctioned for the middle school. Finally, a preschool of seventy children was launched with a village resident as teacher.

Corporate Welfare

In order to develop the potential of Nandapur's women, a Mahila Mandal was organized with approximately forty women. In the spring of 1978, a fifteen-day camp was attended by women from all castes to learn elements of nutrition, basket making and ways of starting industries in Nandapur. Several excursions have also been made by this group to nearby Parbhani University for informal training.

Future Directions

While the Nandapur Human Development Project has achieved much in the first year of actuation, there is still much to be accomplished in order to fulfill the vision of the village as set forth in the initiating consult. Principal among these needs are the obtaining of a truck for transporting crops to market, and several small scale industries to provide further economic growth.

SEVAGRAM HUMAN DEVELOPMENT PROJECT
Initiated June, 1978

Baseline Description

Sevagram was given its name by Mahatma Gandhi. This "village of service" is predominantly a Buddhist community. Gandhiji selected the village as his home in 1936. The land was given to him by Jamanalal Bajaj in whom Gandhi recognized a great spirit when he opened the Laxmi Narayan temple to the untouchable caste. As Gandhi's home it became the birthplace of freedom for the nation of India. During the years from 1936 until Independence on August 15, 1947, Gandhi spent long hours in Sevagram thinking and praying on the methods required to remove the injustices in the nation and to establish a new social order. His dreams for the rural villages of India, so much at the heart of his vision for a new nation, still linger in the minds of Sevagram's residents. The Gandhi vision for a people who are productively engaged in cottage industries, living a simple and hygienic life, is a motivating foundation for rural development as it is emerging in India in the 1970's. Today the Sevagram residents are increasingly being drawn away from a purely agricultural economy toward jobs in nearby Wardha, especially in the Kasturba Gandhi Institute of Medical Science. Such tensions are challenging the residents to invent a sound economy and a reinforcing social fabric. The presence of the Gandhi Ashram and its many national and international pilgrims is certainly a factor in the social atmosphere of the village. Both village and Ashram are looking forward to renewed effort in developing the village.

The project area consists of 644 hectares, including a central village and five family homes in the surrounding fields. At the time of the consult, the population was 2,158 of whom 499 were men and 299 women over 60 years of age. The village had few public facilities: a primary school, a panchayat office, a Buddhist temple and a branch of the Central Bank of India. Two furlongs from the village centre is a high school that serves several surrounding villages and Wardha itself as well as Sevagram. The village had electricity and a few pathways had been paved in the past, although there was a marked absence of drains. As a result, the streets and paths were dirty. The twenty-odd Gandhi toilets served several private families but the predominant latrine was the main road and streets. A sizeable nulla or canal winds through the central area of the village and was crossed by two cement bridges. The village was easily accessible by a tarmac road with ten buses a day; one bus every hour during the daylight hours. Also one kilometer away is a train stop that has a morning and evening train. When the project began, the population supported itself by many small plots, mostly cotton and jowar plus wheat, dahl and other vegetables. Only 90 acres of land are irrigated. On the average, a farmer had 10 acres or so, although one family owned 100 acres. The Gandhi Ashram also worked

300 acres and hired 50 to 60 workers from the village. This agro-base was supplemented by jobs in Wadha, over 100 working in the medical institute, four or five in administrative jobs. There were some 135 farm labourers and 21 non-farm labourers. The milk from 300 cows was distributed by the individual families either to the Ashram or the medical institute hospital. Thirty people saw themselves as businessmen. There were one ironsmith, a carpenter, six tailors, three cycle shops and five grocery shops. The average income was Rs500 a month per family. The daily farm wage was Rs5. 150 adults were classified as illiterate, 400 had finished primary school and 150 completed secondary school.

THE ACCOMPLISHMENTS

Cooperative Agriculture

Although farmers in Sevagram are largely aware of modern techniques to increase agricultural production and income, implementation of these methods has been sporadic at best. Lack of finances, equipment and ongoing guidance have all slowed the pace of agricultural development. In order to reverse this trend, during the 1978 monsoon season, several measures were taken. Panjabrao Krishi Vidyapith (P.K.V.) gave the loan of a tractor for ploughing of fields. Four quintels of hybrid jowar seed were distributed to farmers with five acres or less. A demonstration plot of one and a half acres of CHS5 hybrid jowar and one half acre of papaya were planted to demonstrate proper cropping techniques and to introduce a new cash crop. Papain latex will be extracted from the papaya trees. The papaya will produce Rs10,000 - Rs15,000 net from one acre. Vegetable seeds were distributed to each family for kitchen gardens. Also each family received three tree seedlings (guava, papaya, eucalyptus and/or coconut palms). Three acres of land have been added to the demonstration farm by the Zilla Parishad.

Appropriate Industry

One block to the development of Sevagram is the untapped potential for village businesses which would increase village income. In spite of large potential markets near at hand (the Gandhi Ashram, the Medical College and the towns of Wardha and Nagpur), the educated youth of the village can find little employment in Sevagram and so must move to urban centres. Immediately after the consult, a push was made on women's industry. P.K.V. donated six sewing machines and ladies of the Mahila Mandal were taught to sew garments. An electric grinding machine, also courtesy of P.K.V., began to turn out massala and other spice powders for the hospital and for sale in Wardha. Prior to the Rakhi festival, the Mahila Mandal made hundreds of Rakhis for sale locally. A partially built go-down, abandoned several years ago, is being converted into an industrial shed. Finally, financing, training and markets have been obtained for a spinning industry. Fifty ambar charkas have been ordered and delivered for this industry and women are now in training. Fifty more have been sanctioned by the Khadi Commission. Besides sewing, the Mahila Mandal is also manufacturing Laddi packets of nutritious food to sell at the Medical College for 2.5Rs/day.

Commercial Services

Blocked access to capital financing has continually deterred Savagram's development. In order to inject needed funds into the village, the Bajaj Company has agreed to adopt Savagram and to invest three lakh rupees there over the next three years. Loans are also being arranged from the State Bank of India. Loans sanctioned or in process include 100 ambar charkhas, one tempo taxi, and one tea hotel.

Living Environment

Sevagram is rather unusual in that the village already had some paved pathways, twenty toilets and many brick houses. Since there are no facilities for ongoing physical maintenance, the village gives an impression of deterioration and decay. Even before the consultation, a rehabilitation programme was begun. The school and bus stand were repaired. Each Sunday morning, the villagers now clean the streets by shramdan. The drainage ditches were cleared prior to the monsoon. During the monsoon 1000 trees were planted in front of houses and along roadways and streets. The Zilla Parishad began work in August to widen the approach road. The president of the Zilla Parishad has promised funds for installation of concrete drains, and drain pipes have already arrived on site. In addition, Rs16,000 have been granted for the rebuilding of the primary school.

Corporate Patterns

The Gram Panchayat in Sevagram has been very active in the development of the village, and there is an Agricultural Cooperative Society for the farmers. At the consultation, the villagers expressed a need for organisations which would involve the village as a whole in its development. To this end, several task forces have been organized. These are informal groups which meet weekly to implement the recommendations of the consultation in the areas of agriculture, industry, construction, health and education. The village has been divided into five neighbourhoods, geographic areas. The project auxiliaries visit daily in their assigned neighbourhoods to discuss the concerns of the villagers and to encourage participation in community activities. Each Sunday, a shramdan is organized to encourage the villagers to maintain the physical environment. Central to the direction of the project, is the village leaders weekly planning meeting. At this time the work of the past week is reviewed. Then the next week's assignments are made to visit public and private sector officials, to organize shramdans, and to carry out any development steps planned for the coming week.

Village Identity

Sevagram is remarkable in that it is a village with a strong historical identity. The presence of the Gandhi Ashram and the Medical College have put Sevagram in the eye of the nation and the world. Gandhi also strengthened

the village's identity by changing its name to "Sevagram" (village of service). In recent years, however, this village identity has become rooted in past events with little relevance for the future development of the village. At a Village Meeting, before the consultation, the villagers created a village symbol, portraing the theme that the development of Sevagram will be a sign of hope for all villages of the world. A signboard with this symbol has recently been placed at the village entrance. Some thirty youth from Sevagram and the surrounding villages have been sent out as volunteer social workers to catalyze the development of other villages in Maharashtra.

Preventive Care

Sevagram is fortunate in have the Medical Hospital attached to the village, giving villagers some of the finest curative medicine available to any village in India. The major health problems in the village are in the arena of preventive care, particularly with regard to sanitation. A demonstration toilet was installed at the time of the consultation. Subsequently a survey of households was conducted and plans were drawn up to install one toilet for each household in the village before the end of the two year project timeline. The District Health Office will help in executing this programme. All wells are being purified regularly with bleaching powder. All village streets are being cleaned weekly by shramdan. Cleaning and maintenance of the existing drains during the monsoon season helped reduce the possibility of malaria. The Zilla Parishad has sanctioned funds to complete a comprehensive, concrete drainage system.

Functional Education

Sevagram is well endowed with facilities for formal education from preschool to secondary school in either Marathi or English medium. Of the adult population many are educated. At the beginning of the project, 25 students attended night classes in English. A community library was initiated. Subsequently, sewing classes have been given to thirty women. Thirty villagers received training in village development and are working in Sevagram and throughout Maharashtra.

Corporate Welfare

Prior to the consult, Sevagram had an informal Mahila Mandal and youth club to attend to the needs of these two groups. Since then, steps have been taken to register the Mahila Mandal so that it will be eligible to administer funds for the development of women's industries, as described above. A village-wide survey has been completed, giving economic and social data on each family. In this way the project staff can monitor the participation of each family in the project and the degree to which each family is benefiting from the project.

Future Directions

The people of Sevagram have accomplished a great deal in only five months of actuating the vision set forth during the June consult. Much is also still to be accomplished, of course. Two primary tasks to be launched in the near future for village visibility include the construction of drainage throughout the village and the renovation of a central chowk.

FIVE FUTURE NETWORK VILLAGES

These five villages are at least one year into their projects and in most cases, 18 months. They are of the larger more developed type and/or situated to be critical to developing regional economic networks. Each of them has shown promise for overall development as demonstration villages. Being more complex villages, they have encountered internal and external obstacles to their development. Internally, 100% support for the project has either not been forthcoming or has waned under the weight levied by the task of development. Externally, the villages are in need of a significant injection of capital and the cooperation of the larger regional community in order to build a strong economic base and generate momentum.

KOLAMBI HUMAN DEVELOPMENT PROJECT

Initiated December, 1976

Baseline Description

The project area covers 1900 acres of land, most of which is used for farming and grazing. At the heart of the village centre is a hill on the slopes of which small mud homes, clustered along narrow winding streets, extend down toward the flat lands below. The population of the village in December 1976 was 1500, of whom one-third were younger than 15 years of age. Approximately 33% of the people were literate. The majority of families in the village own small plots of land, between two and ten acres in size. A small percentage owned as much as 40 acres of land. The village was served by two schools which offered classes through the seventh standard. Public facilities included four temples and three small tea shops. There were four kirana shops, one cobbler shop and two flour mills. Health services were located 12 kilometers away at the Borgaon-Manju Hospital. Although malnutrition was not serious among the villagers, skin diseases were obvious. Electricity installed within the past decade, provided power for village lighting and pump irrigation. Drinking water was supplied by three wells. Animals included bullocks, cows and goats. The majority of the people farmed their own land or were hired as labourers on the larger farms. The three major crops grown were cotton, wheat, and jowar; rice, onions and mangos were raised in small quantities.

THE ACCOMPLISHMENTS

Agro-Industrial Development

Irrigation is the key to agricultural development in India and the water table at Kolambi is near the surface. Yet, inadequate crop irrigation was listed as one of the blocks to agricultural development. By March 1, 1978, eighteen new irrigation wells had been dug and 37 new electric irrigation pumps purchased. Demonstration plots in wheat, jowar, and cotton were sponsored by private fertiliser companies with the result of numerous cultivators upgrading their own crop production through the use of chemical fertiliser and hybrid seeds. Cotton production was expanded and a cotton gin in nearby Borgaon-Manju has been offered for Kolambi farmers use. A demonstration tobacco plot yielded Rs4000 net profit on one acre, offering the possibility of another alternative cash crop. Six acres of papaya for papain were planted in August 1978 under a contract to a papaya company which has agreed to contribute 2% of the gross sales to the community funds. A recent analysis indicated the profitability of raising oranges. Two farmers have now purchased 300 seedlings each. A cattle shed and a cattle drinking tank were built and an artificial insemination programme launched to upgrade the output of village cows. With the aid of a Khadi Gram loan a welding machine was added to the blacksmith's shop.

Commercial Services

Kolambi's commercial life visibly expanding as ancillary contracts were secured for a village tailor and carpenter from Akola businesses. A weekly market was begun shortly after the start of the project and has grown steadily so that now 80% of the merchants are local Kolambi farmers. The State Bank of India has worked closely with the project since the beginning in loans to farmers and for the establishment of a kirana shop and shoemaker. In 1978 SBI adopted Kolambi.

Living Environment

Perhaps the most significant undertaking in the Kolambi project's construction programme was the building of 17 homes for the landless Harijan community. A pilot project of two houses was built during the first six months, funded by the district government. The remaining 15 were constructed in the spring of 1978. In addition several houses were whitewashed, one temple painted with colour wash, electrification was extended and streets were all named and street signs posted. Fruit trees were planted in 100 households through a project of the Lions Club of Akola. The access road which runs through the village has been graveled and a drain built on one side.

Corporate Patterns

"Unplanned forms of community life" is listed as the paramount contradiction in the village. To deal with this the people of Kolambi have formed five task forces in the arenas of agriculture, industry, commerce, education, and health and construction. These task forces meet regularly to plan and then actuate development in their specific arena. A leaders meeting coordinates the activities of the groups and a village assembly looks at the overall progress of the project. Villagers regularly take part in calls on government officials and private professionals and businessmen to enlist their aid in the project. In addition, people attend weekly neighbourhood meetings for the purpose of caring for all the people in their section. Recently a complete census was taken to provide information upon which action could be taken in these neighbourhoods.

Village Identity

With the rise of industrial development and the devastating drought of the early 70's, the village's image of self-worth has collapsed and must be reestablished for authentic development to occur. This is true in many of the villages in India. To counteract this identity crisis a story of Kolambi's leadership, not only in its own development but also as a sign to villages across India, has been developed among the leaders and residents of the village. To achieve this end, a newspaper is published periodically, a sign welcoming all to Kolambi was erected at the village entrance, and an announcement board was built. Since February 1978, villages considering participation in Nava Gram Prayas have come to Kolambi to see what has been done and have been hosted by a team of villagers who tell their story and answer the new villages' questions.

Preventive Care

Kolambi residents do not seem to be marked by serious malnutrition or other diseases, except for certain skin diseases. The village, however, had no regular medical care before January 1977. For six months a doctor from a neighbouring village held weekly consultations and donated medicines, until Kolambi could be designated as a sub-station of the Primary Health Centre with a nurse in residence. The Rotary Club of Akola participated in a monthly polio immunization series that was coupled with the District Health Office Triple antigen immunization in August-October of 1977. Over 200 children completed the polio series and every child attending school received the triple antigen. Children from surrounding villages also participated. In November, a house to house tuberculosis immunization campaign was held in which all Kolambi residents under the age of twenty were given the opportunity to be inoculated and 90% responded. Another aspect in the arena of preventive care has been the education of the people through stakes and more recently in a mass meeting of nearly 500 people in the five essential food groups. To demonstrate nutrition, a well-balanced lunch was served to the children in the preschool and a baby-weighing system was established to record the monthly growth of all children under five. As a move toward sanitation, ten S4 toilets were constructed.

Functional Education

Educational programmes received a high priority in the Kolambi project. A preschool was started immediately after the consult and was housed in a facility donated by the village. Uniforms were donated and stitched by the village women. Two teachers were trained from the village, to work along side one staff member. English classes were held for primary and high school students in the evenings and 130 adults have participated in literacy classes. Cultivators have benefitted from training provided by specialists from the PKV both in formal sessions and through films. Thirty-five women attended a women's forum on the woman's role in development.

Corporate Welfare

The thirty-five women attending the forum have since become a registered Mahila Mandal, a rigorous process which was an education in itself. In addition, many women have attended family planning classes. 30 youth formed a youth club to provide regular recreational activities, especially volleyball.

Future Directions

Continued effort needs to take place in the arena of community development in Kolambi. Until there is a breakthrough in the arena of small-scale industry, Kolambi will not be fully developed, although agriculture will continue to be basic and it may be in agro-industry that the breakthrough will come. Also, there is much to do on the physical environment. The village is compressed into a small area which magnifies the need for adequate drainage, animal shelters and recreational space. Key to future development is a deep resolve to work together and the creation of a legal structure to ensure corporate action. "Now is the time for action," is a village slogan.

KENDUR HUMAN DEVELOPMENT PROJECT

Initiated December, 1976

Baseline Description

Kendur is a large village consisting of 166 square kilometres and divided into two distinct areas: the central village and the 14 surrounding hamlets or wadis. The population in 1976 was approximately 7,199 of whom 25% lived in the central village. This size village provides complexities similar to those in urban areas. Access to the village, 15 kilometres west of the Pune-Ahmednagar highway, is two or three times a day, depending on the season, by State Transport buses that are often quite crowded, since there are a number of other villages on the same road. The road from Shikrapur is very rough, discouraging visitors and making marketing expensive. There was also no internal transportation linking the wadis except by oxcart or walking. Two privately owned trucks, two motorcycles and 5 bicycles shops were available in the village.

Approximately 65% of the villagers were landed farmers. Twenty percent were labourers of whom one quarter sought employment outside the village. Fifteen percent were artisans who earned a low daily wage. The farmers were aware of and used hybrid seeds and fertilisers but often lacked the motivation or skill to apply modern techniques systematically. There was no tractor in the village. Land levelling was an obvious need. There were 11,935 acres of land of which 10,200 acres were cultivated; only 9,000 acres having sufficient supply of water for productive cultivation. The main crops were onions, bajara, beans, potatoes and groundnuts. There were 32 retail businesses including general stores, tea hotels, a cooperative bank and cloth shops. And yet, the residents continued to purchase commodities in Pune or the nearby town of Pabal, 5 Km away across the Vel River. Traditional craftsmen such as carpenters, cobblers, blacksmiths, potters and basket weavers worked in the central village, only one-third resided in the village year around. The rest had seasonal employment in Bombay.

In terms of basic services the central village had good electrical coverage including a number of agricultural units. The Vel River Project proposed 10 years ago to dam up this monsoon river and run channels for irrigation along the river banks, was much too costly for the amount of benefit to Kendur and other nearby villages. Domestic water in two wells was ample and treated, but the wells were located on the far edge of the village. Twenty percent of the houses in Kendur were unoccupied and in a deteriorated condition; 40% were in need of major renovation. Many owners had moved away to the cities or out to the wadis so they lacked the interest to invest in new construction. It would be a massive undertaking to clear the rubble and renovate houses. Generally Kendur had ample cultural facilities and communications. There were twelve temples, a postal unit and two television sets.

The main types of disease were malaria, typhoid, scabies and worm infestation, while malnutrition, dysentery, fever and pneumonia were common illnesses. A government primary health unit staffed by one doctor and 2 or more interns also served 20 other villages as an outpatient diagnostic and treatment centre. It had a four-bed obstetrical ward and family planning services as well as an emergency vehicle for transporting serious cases to Pune. The village was generally well-educated with over 25 university graduates living in the community, and yet illiteracy prevailed among the older and economically weaker members of the community. The central primary school had an enrollment of over 1,000, half of whom came from the wadis. The wadis also had eleven primary schools up to fourth standard. A private secondary school had over 300 enrolled.

THE ACCOMPLISHMENTS

Cooperative Agriculture

Efforts to develop dairy cattle in Kendur began with a government sanction for 100 cow loans in 1977. Ten farmers have taken loans and purchased cows through Canara Bank. Milk production of the Dairy Cooperative has greatly increased, since the initiation of the project. In March, 1978, construction of a veterinary dispensary, in process for three years, was completed and the Chief Executive Officer of Pune District arranged for a special artificial insemination programme to be launched in Kendur. Over 200 cows are being monitored through the scheme. The effectivity of the unit in Kendur has led to a recent approval to shift a more comprehensive animal service centre to Kendur as part of a larger government plan for cattle development in the area.

In June 1978, three types of fodder were planted in an experiment to further upgrade milk production. Also $\frac{1}{2}$ acre of papaya was planted near one of the village temples. The landless labourers in Naik Wadi are eager to participate in a corporate dairy, but lack land for growing fodder. The groundwater survey begun in December, 1976, was completed in April 1978, and now provides a basis for improving water access. Seven farmers, catalyzed through work with the CEO, have demonstration plots utilizing seeds from the Panchayat Samiti and expertise from the Pune Agricultural College.

Appropriate Industry

In anticipation of a promised contract from a Pune Industry, in September, 1977, two women purchased a 3-needle commercial sewing machine with a loan from Canara Bank in order to make yellow duster cloths. The first batch of cloths has been sold and the proceeds paid on the loan. David Brown Greaves gave an order for a different type of duster, which other women are involved in making. This industry has given employment to 6 women.

In January, 1978, an Industries Field Day was held in Kendur to determine potential industries. Representatives from industry, government, and financial institutions recommended a central dairy, rope-making and other sissel fibre products such as brooms, and baskets, lime processing, brick-making, a papad factory, uniform tailoring, a sissel plantation, chalk, candles, wooden crates and leather working. Brick making was begun immediately with two families. In further conversations with 10 industries in Pimpri-Chinchwad an interest was expressed in arranging ancillary industries in the village, and an engineering student from Pune has volunteered his time to following this through. Seven educated unemployed are working with the Bank of Maharashtra for loans to start the lime processing industry. Kirloskar Consultants have assisted in the feasibility studies and proforma preparation. One resident has gone for training in candle and chalk making and has funding arranged for a candle factory but has not secured a wax sanction. Industrial development has been quite hampered by the poor road from both Shikrapur to Kendur and Koregaon to Kendur and by limited managerial skills.

Commercial Services

Financial awareness has been slow to develop in the village but two events in June, 1978, have heightened it. The first was a Triple-the-Income workshop held with various individuals and groups to see how they might improve their income through capital investment and improved methods. The second event was a loans survey, to clarify the defaulters situation to begin the long process of getting loans and monitoring the repayment. Relations have been developed with the Bank of Maharashtra in Pabal and adoption is under consideration.

One store owner has enlarged his kirana shop and made it into a wholesale unit to sell to the other shop owners. He has also purchased additional property where village industries can be housed. A major service to accelerate industrial development was added recently when a phone was installed in the primary health centre. Verbal agreements were made in May, 1978, with three Pune industries to market vegetables, particularly onions and potatoes, directly to the company canteens at regular market prices.

Pune support for the development of the village, inspite of the distance (50 Kms) has been growing. On two nights in February 1978, some 20 industrial and business managers gathered in Pune each night to talk about how they might engage in Kendur's economic development. Site visits have been made by Wansons, Greaves Cotton, David Brown Greaves, Ruston Hornsby, Telco, Canara Bank, Western Maharashtra Development Corporation, Khadi, and Kirloskar Consultants. All economic ventures have the village consensus to put a percentage of profits into the village's further development.

Living Environment

Although the depth contradiction in Kendur is expanding the economic base, existentially the physical environment of the village is de-motivating. The village has the appearance of a wartorn area, 50% vacant. The first major step to deal with this issue was the invitation of the College of Engineering first year town planning students to come and do a master plan for the village. The presentation of the plan to the village leaders, the CEO, the Pune town planning head and interested individuals generated village interest in the reconstruction of the entrance - an established market place. With no funds to activate the designs of the students, the village went ahead with shramdans clearing weeds, cleaning streets and lining them with white stones, digging and building a stone drain, making an attractive garden and erecting a flag pole. Two large cement tree rings were constructed; one is 15' x 20' and is used for marketing produce and one is 6' in diameter.

A community centre has been cleared out and refurbished in the old primary school. The building also serves as a residence for the ICA staff who have constructed a latrine, bathhouse, soakage pit, stone slab cabinet and sink for a demonstration kitchen, and installed electricity. The outsides of the three preschools were painted and a library platform was constructed in a temple with shelves and seats. Other construction catalysed in the village includes a new secondary school facility (they have been renting space from the primary school), a flour mill, shop expansion and some home improvement. The bus stand in the central chowk, as well as several shop fronts and the temple in the chowk, have been painted and a ditch was dug behind the bus stand to drain off rain water during downpours; the road was also levelled near the bus stand.

Plans for an industrial shed have been prepared. The State Welfare Department has agreed to build a model house, a community centre, pathways and drains in the Harijan community. Designs have been drawn up for this overall reconstruction, but implementation has been blocked by the need for a less expensive design for the house.

Village Identity

The village history was written at the Gram Sabha and consult in December, 1976. A village symbol was designed in October, 1977. An entrance signboard was put up along with project programme signs and street signs. A number of national celebrations have excited village interest. Prizes were given at the annual sports day for the first time. The leaders held a tea on New Years Day to review their work and claimed promises for the future. Villagers from other villages have begun to visit, heightening Kendur's consciousness and Kendur residents are participating in Gram Sabhas and consults for other village projects. A village newspaper has been printed occasionally.

Corporate Patterns

Once shunned by other villages as 'bad' and 'criminal', Kendur is beginning to gain a new reputation for itself. Weekly meetings in the five neighbourhoods of the village total over 125 people and provide a forum for all sections and castes to give input into the project. There are two task groups meeting regularly, Social and Economic, to plan and execute the project. Bi-weekly leaders meetings and quarterly community assemblies are beginning to shape village consensus on project directions. Weekly and daily shramdands are also helping to form a new community unity. Hampered by its strung-out nature and excessive vacant properties and the complex tensions with the wadis, community unity has been difficult to achieve.

Preventative Care

The project has worked in conjunction with the Primary Health Centre to upgrade health, nutrition, and sanitation. Health films and training classes were held in 1977 and 1978. Two women in each of the five neighbourhoods were trained as health caretakers during a 10 day training camp in May, in which Kendur hosted four other project villages. In February 1978, a scabies campaign was held in the Harijan community and medicine was made available to the whole village. An eye examination camp was held at the Primary Health Centre in March, 1978. The operations were held on site by a Pune doctor with the loan of the necessary equipment.

A toilet camp was held in November 1977 for the Pune District. Over 50 village households requested latrines to be built on the Gandhi style near their homes. Twenty-three of these have been completed to ground level. One family installed a gober gas plant. In April, 1978, rubbish bins were installed improve general village cleanliness. The two wells in the Harijan section were both drained and blasted to see if deepening could produce drinking water. When this failed, AFARM offered a matching grant of Rs 5,000 toward the drilling of a new well and taps into the Harijan area. The site has been selected for the well and AFARM has the plans for the piping.

Peanuts and vegetables have been grown in a community garden over the past year to be used in a nutrition programme for the preschool. Monthly baby weighing enables spotting undernourished children in time to remedy it. A Healthy Baby Contest in February has made mothers more aware of nutrition.

Functional Education

Since the inception of the project, a preschool programme (full day) with a hot nutritious meal has been conducted. In February 1978, Terre Des Hommes; Germany, agreed to assist the expansion of the programme to

to include all 150 children under 5 years. There are now three neighbourhood schools with 6 village teachers and a cook. The preschool trip to the Pune Flower Show was a great event and was enabled by a free bus from Bajaj Auto.

An English literacy course was held for 130 village youth in 1977 and was combined with weekly workdays. The course culminated with a trip to the Pune Zoo, again with a Bajaj bus. Marathi literacy was taught 5 nights a week in the 5 neighbourhoods for 10 weeks in 1978. English classes for unemployed youth are now being held in association with Ruston Hornsby in Chinchwad, who will provide job opportunities.

A group of 35 farmers went on an educational trip to the Pune Agricultural College with transportation assistance from Phillips. International Chemical Laboratories held a one day training demonstration in chalk, candle, soap and incense making. Over 100 people attended. Over 20 village youth have been trained in the Human Development Training Institute in Maliwada and are working in five other village projects. Practical instruction in book-keeping and meeting leadership were provided in June, 1978.

Community Welfare

Two village-wide Global Women's Forums have been held with over 50 women attending each time. The Mahila Mandal is in the process of registration so as to undertake economic ventures. Women have been trained in sewing. The youth of Kendur hosted a group of girls from Pune for a picnic. Charts have been prepared to show the involvement of each family in the project, their economic status, and to ensure that those who are most needy will benefit first from new economic programmes.

Future Directions

Of all the villages in the Maharashtra Project, Kendur has one of the broadest ranges of potential programmes to demonstrate. But, first of all access to the village needs to be greatly improved in order to overcome its distance from Pune and Bombay markets. The Shifrapur-Talgaon road must be paved and a small bridge completed on the river between Kendur and Pune to give rapid access to both the Pimpri-Chinchwad industrial complex and Bombay. Also, the internal roads and streets must be improved to facilitate agricultural marketing. Second a number of ancillary industries are needed to employ the existing artisans, the unemployed youth and the landless people and guaranteed markets for local products must be located. Third, a skills training programme is needed to prepare the population for new industries.

Fourth, the village master plan must be implemented to renovate the housing, build a series of industrial sheds, level vacated properties, build many community facilities (including preschools and an educational centre for groups coming to learn methods of community development)

and beautify the village. Fifth, installation of a drinking water system of pipes, pumps, storage tank and taps is needed to improve village health and conserve village labour for industry.

The sixth need is an irrigation system of new wells, canals, lift irrigation, field electricity and a small river dam to harness the available water and to cultivate all the land year round. Seventh, farm equipment, including tractors and pumps are needed on a village rental system, and a farm management training programme must be provided to further modernize the agricultural techniques.

Eighth, the intensive programme to organize the village residents into neighbourhood units and taskforces in order to transcend old factions and divisions must be continued. Ninth, an intensification of the efforts of the Primary Health Centre to carry out grassroots health education and health camps is needed to eradicate disease and strengthen the population.

TASGAON HUMAN DEVELOPMENT PROJECT

Initiated March, 1977

Baseline Description

The village of Tasgaon had approximately 2500 residents when the project began; most of which were farmers and agricultural labourers. Others had skills in blacksmithing, shoemaking, carpentry and ropemaking. There were five kirana shops and two flour mills, and a machine for grinding chillis. Although irrigation is available to very few farmers at present, the village comes under a government canal scheme and will receive ample water after a five year period. Drinking water was abundant and of good quality, coming from three clear underground springs with masonry cisterns built over them. The River Krishna provides adequate water for washing. The village was very attractive with large banyan trees giving shade, and fine stone houses and temples in parts of the community. The headmaster and teachers of the high school stay in the village and formed an important part of village life. Thus several young people speak good English and there were some educated unemployed. Many families had a wage-earner in Bombay who sent money and visited annually. The village had a subpost office and electricity; many buses passed, although they were mostly full. The Gram Panchayat was constructing a new office in the village. There were several wadis including a Harijan wadi which had an acute drinking water problem and one which had no electricity. All these wadis were connected to Tasgaon by extremely bad roads. The village had the name "Beggary Tasgaon" as many years ago, wandering beggars made their home there. Fifty years ago it was a prosperous community but by 1977 it had declined.

THE ACCOMPLISHMENTS

Cooperative Agriculture

The farmers of the village carried out an important experiment in cooperative agriculture, and experienced the benefits and struggles of working together. They decided to undertake production of hybrid jowar seed. The government guaranteed a market at a good price for this seed, but in return demanded that the production meet stringent requirements to ensure that the seed would be of high quality. 28 Tasgaon farmers contributed a total of 35 acres in a plot irrigated by wells to the west of the village. Loans for these farmers were secured from the State Bank for the purchase of seed and fertiliser. From the beginning the farmers experienced the difficulties of such an experiment. Seed planting was delayed by late rains, and when planted and growing, the young plants were attacked by a caterpillar called army worm. Many plants were lost before the worm was eliminated by pesticide and by hand. The cultivation of hybrid jowar demands that male and female plants be kept in separate rows and that all 'rogue' plants be removed; in addition, there should be no local jowar within a specified distance of the plot. A number of government

inspections check that the plot meets these standards. The Tasgaon plot passed these inspections. When harvested, after dangerous late rains, the seed from the female plants was inspected and tested; some 70% of the Tasgaon seed was accepted. At this time the government decided to cut its buying price by nearly half because of a glut in the market that year. This, together with the early destruction of many plants, meant that profits were much reduced from those expected. The cash from sales was distributed according to a farmer's yield, but not according to the quality of the grain. This meant that the farmers bore the loss on the bad seed as a group. In addition, those who made a profit agreed after much discussion to contribute 20% of this profit to help pay back the bank loans of those farmers who had low yield. Although profits were not as high as expected overall, the experiment ensured that no individual farmer had a complete loss for the year and the corporate care of the plot ensured that all met the government standards. This experience has encouraged a number of farmers to grow hybrid jowar seed this year and to experiment with other new crops.

Appropriate Industry

During this time the village women formed an active Mahila Mandal with regular meetings and activities. Their primary achievement was the initiation of a successful papad making industry, which is now owned and run by ten women. Papad is sold in 6" diameter dough cakes which are fried to a golden crisp. To begin this industry, the ten women each took out a Rs500 loan at a preferential interest rate of 4%. They went to Pune for a week's training at Lijjat Papad Industry. A building was loaned free for the industry by a villager. The women have two major orders at the moment, each for 25 kg. per week. They gain Rs1.50 per kilo out of which they pay back their loans. The woman who is selling is paid as much as the other women earn that day. The women are working on more impressive packaging, quality control and expanded orders. A brick factory was begun on 6 March, 1978. The village is in the process of establishing a carpet weaving industry with materials and market supplied by a Bombay company.

Commercial Services

Apart from the loans to get seed for the cooperative farm experiment, the loans to start the papad factory and the bus company financing the bus stand, very little capital has gone into the village. While this is admirable as a programme of self-help, it has also failed to develop the financial structure in the village, which it needs in order to relate to the wider regional economy. On the other hand, a core of villagers have demonstrated their readiness for taking responsibility for the development of the village. Regular meetings of the Arthik Kranti Kameti, the village's Economic Development Association, oversees the economic ventures and supervises fund raising for social development. They helped to set up the brick factory which is a partnership of ten men. They make bricks from clay from the river and coal dust imported from Indian Railways.

Living Environment

A number of shramdams recalled the previous construction projects which the village had worked on. For example, on one side of the centre chowk there is a set of stone steps leading to the main temple and office. This was built 20 years ago by a number of villagers each contributing the stones for one level of steps. So a project was organized to rebuild the central chowk, called 'Shivaji Chowk', and many villagers took part. From a muddy patch of ground the chowk was transformed to a paved stone platform 40' by 50' which has become a well-used meeting place and playground. Further shramdams were organised to prepare the foundations of the approach road to the village, some 600 yards long, which was afterwards surfaced by the government. To the left of this road a piece of ground was levelled and surfaced with river mud to provide a sports ground for Kabadi and volley ball for the village youth. Much of this construction work was initiated by the Tayar Tufaurifaus, a youth strike force. A new bus stand financed by the bus company and a signboard mark the entrance to the village from the main road. In the village itself, 30 very old street drains were discovered beneath the accumulated mud and were cleaned out.

Corporate Patterns

Apart from the Arthik Kranti Kamoti there are regular meetings of the village leaders, including the sarpanch, schoolmaster and one of the tailors. The villagers have led Gram Sabhas in other villages and hosted an inter-village meeting in Tasgaon at which they exchanged information.

Village Identity

As a part of the construction effort a mural depicting the village land decorates the wall at the rear of Shivaji Chowk. A newspaper was prepared and distributed early in the project. The streets are named and there is a signboard for each project programme each carrying a village symbol. The village is very conscious of the power of songs and rituals that are well-known by everyone. Decor and celebration generally reveals an active recovery of the village's identity.

Preventive Care

At the time of the consult, the village had a health sub-centre where a government nurse visited on a daily basis, but it was housed in an extremely small and inadequate room. A second building was donated by a villager and this was painted and its floor paved by shramdan to be used for a new health clinic. A government doctor and a Satara Rotary doctor now visit the village once a week, handling 200 patients. A health camp was held at which all the villagers were immunised against cholera. Various health education classes and film shows were held, primarily for the women of the village. A baby-weighing scale and record cards were obtained and a regular programme begun beginning with a baby-weighing competition with donated prizes. The government sub-centre now has a separate delivery room. A demonstration toilet and soakage pit were built and two latrines then constructed. Drains and latrines were constructed for the preschool and the preschool painted with its floor paved.

Functional Education

The preschool has 30 children who are provided with a nutritious lunch each day, and uniforms were made by the village tailor. There are two village staff and two ICA auxiliary staff. As many as 60 adults have been out for literacy classes. Due to the high school being under the Rayat Shekshan Sansta a group of students came to Tasgaon for a series of workdays helping with the streets and drains.

Community Welfare

The women's role in village development has been outstanding in the papad factory, village meetings and the creation of the Mahila Mandal. Through the Mahila Mandal a community kitchen is operated by women cooks. They also play a major role in maintaining the preschool and supervising village health.

Future Directions

Tasgaon stands as a village that has demonstrated its readiness and willingness to develop itself. Its next tasks are to make the substantial alterations necessary for a demonstration village. A major job is the physical reconstruction of the village: streets, drains and houses are in need of improvement and beautification. This will require a significant influx of capital from outside sources. Secondly, a significant small industry is needed for unemployed men and women. The actuation of the carpet weaving industry would meet this need. Finally, a continual basis for cooperative farming needs to be created whereby additional skills and profitability are gained by the farmers who have demonstrated their capacity for demonstration farming.

CHIKHALE HUMAN DEVELOPMENT PROJECT

Initiated March, 1977

Baseline Description

Chikhale as the project village nearest to Bombay has risen to occupy a role of firstline significance. The project area covers approximately 12 square miles comprised of a residential area and surrounding farm lands. Its name means "muddy place" being bordered on three sides by the Chikhale River and on the north by a low range of mountains. During the monsoon the streets of the village become veritable torrents of continually flowing water, scenic but debilitating for commercial travel and community interchange. The approach road is 2 kilometres of mud, rocky ridges, pot holes and a one-lane steel bridge. The pond at the entrance to the residential area completes the impression of being a swampland amid fertile fields, and an island of homes.

The population in 1977 was approximately 1500 of whom 35% were men, 27% women and 38% children. In terms of health the dominant feature was that of the Naru or guinea worm that infected the major community well. Over 50% of the village were infected with the worm which becomes rampant when the well water level is low during the dry season. Dysentery, tuberculosis, chest ailments and leprosy also existed. There was no health clinic when the project began. The nearest primary health unit was at Nere, 12 kms away, and most people went to private doctors or the government hospital in Panvel, only seven kms away.

Socially, the population was divided into two main communities: Agri-Marathas 70% and Brahmin 20%. The remaining 10% were Harijan, Muslim, barbers, goldsmiths and others. The Brahmins lived in the upper portion of the village in large, two-storey houses which had separate animal sheds and were widely spaced. A wall separated them from the Maratha community who had small houses, built closely together, separated by narrow paths.

The major occupation was farming with most farmland belonging to small landholders. The chief crops were rice, chillis and vegetables. Not only was the range and amount of produce small but access to the urban markets was severely restricting. Modern methods were not known or used and each farmer tried to eke out his own family's existence from the little bit of land that he had. Land development beyond the naturally irrigated land was virtually nil.

There was one primary school serving the first through seventh standards. Approximately 150 children or roughly 3/4 of the school-age population attended. The remainder worked in the fields with their families. Since there was no high school in the village, students had the choice of going to Ajoli (4 kms) or Panvel. The education of the village was understadably low and most adults were illiterate, especially the women.

Communications were as limited as one might expect. Chikhale's post office at the time of the consult was in Ajoli. The State Transport buses were available from Chikhale Phata, 2 kms away on the national highway, Pune-Bombay. Bicycles, tongas, bullock carts and walking were the usual modes of transportation.

Basic services included electricity and the one community well. There were two kirana shops side by side in the Maratha community. Community sanitation was extremely poor, depending mostly on the rains to wash away waste materials. Due to the dirt and mud personal hygiene was dehumanizing. Commercially the village was generally in debt and paralyzed. The village was administered with Ajoli under a common panchayat.

THE ACCOMPLISHMENTS

Cooperative Agriculture

A few months after the project began an arrangement was worked out with a major Bombay hotel that Chikhale farmers would supply them with vegetables on a regular basis. As a result, a farmers association has been formed and its registration is in progress. Twelve farmers with 33 acres have not signed their regular contracts with commercial agents in order that they might sell directly to the hotel. Also, the acreage of vegetables has increased from 183 acres to 241 acres under cultivation. This shift to regularly contracted, better priced cash crops is expected to double the village income in one year and triple it in three years. The actual implementation of this arrangement has been a great struggle to the village because it goes against a time-honoured market system.

Other by-products have benefitted the village agriculture. Soil analysis tests have been completed for over 160 farms. A $2\frac{1}{2}$ acre community rice plot has raised production from 8 quintels to 15 quintels per acre by using hybrid seeds, fertiliser, and insecticides totaling Rs2400. Eighty-nine farmers have also increased their use of fertiliser for 84 acres of rice. In addition some innovations have been introduced to the agriculture of the village. Forty families have received 50 cashewnut trees, and a bund has been built with Rs30,000 from the Panchayat Samite. In order to increase the milk production that goes through the village distribution centre, $1\frac{1}{2}$ acres of Kubabul seeds have been planted on community land for fodder.

Appropriate Industry

At the beginning of the project there were virtually no small industries in the village. Since the project began 120 village residents were employed during the dry season in privately arranged road construction. The major breakthrough has been the engagement of women in remunerative employment. The Manila Mandal was registered to undertake economic ventures and a wool reclamation industry was begun this year to employ 25 people. Also, an Ambar Charkha unit with a guaranteed market has been secured to employ 30 people. The machines are now in the village and training is beginning. In its location near to Bombay, Chikhale's potential for ancillary industries is limited only by the size of the village's work force and the poor condition of the approach road.

Commercial Services

The credit lines of the village have been extended and maintained since the beginning of the project. In addition to the Rs35,600 loan from the Union Bank to the Mahila Mandal for the Ambar Charkhas, the growing of rice and rice processing has been financed. 89 farmers have borrowed Rs29,000 for rice fertiliser and a rice mill with a godown is being set up. It promises to give Rs40,000 per year profit on the village's rice. A general loan survey has been completed to enable the village to work together on loan repayment and the extension of new loans. A milk collection centre has been opened supplying milk to Panvel. Recently, Chikhale has obtained its own post office, and preparation is underway for a new flour mill.

Living Environment

At the end of a muddy road and marked by a large pond near the entrance Chikhale is not an attractive village at first glance. The master plan includes a model street, an entrance chowk, and the reconstruction of the village square. An architect is now drawing up the village designs in detail and will include a prioritised list of the tasks to be undertaken. He has volunteered his services. Liaison with the Divisional Commissioner's office has been proceeding in order to reach agreement on reconstruction of the approach road. The retention walls around the pond have recently been constructed. The bridge was repaired and painted white. The most substantial change to the residences in Chikhale has been the repairing of ten house foundations as protection from flood waters. Shramdands have put stone flooring into the Marathi and Vittoba temples, making them useable for village meetings, and planted 350 trees for beautification and to prevent erosion. Some new home electrical connections have been installed.

Corporate Patterns

The cohesion of the village is increasing through the gradual process of the residents gathering themselves in weekly meetings and in doing village-wide projects. The four neighbourhood groups of 10 or more each meet weekly to determine specific needs. Two other groups of thirty or more residents meet weekly to plan and execute project tasks. The overall consensus is molded in a weekly meeting of village leaders. Recently, new young leadership was elected to the Gram Panchayat and one young man chosen as Sarpanch. The profits of the 3½ acres of community land have gone back into the community for social development.

Village Identity

The social divisions in the village have made it critical to the future of the village to build a cohesive community. In the June to September 1977 period, the project initiated a number of activities toward this end; arranging for creation of a master plan, formation of a local drama club, naming the streets, daily beautification efforts, erection of a village signboard at the entrance, placement of a number of signboards for project programmes, and construction of a community bulletin board. A village newsletter has

been printed occasionally and distributed to each family. Although the old divisions continue, the village has made great strides toward working in a unified way. The August 15 National Day celebration was very significant, with the Brahmin and Maratha communities coming together for the first time in 14 years. As many as 500 people have been out for shramdands.

Preventive Care

The village had decided to provide medical care for itself by remodeling a building in which a new health clinic will operate with regular personnel, ample medicines and equipment. Monthly baby-weighing has also located several cases of malnutrition, and 1200 people were innoculated with Triple Antigen. An eye camp was held with the assistance of a Bombay doctor in which cases were diagnosed and 365 pairs of glasses were fitted, both for residents of Chikhale and neighbouring villages. 29 soakage pits were constructed and nine compost pits. The water supply has been a deep consternation for the village. Although the worms have not been eliminated, a weekly chlorination of the well by the Panchayat Samiti and the Gram Panchayat has been done. The first bore well sunk did not produce water and now a second grant has been procured to attempt construction of a new drinking water well. A water filtration tank is also under construction.

Functional Education

At the outset eleven villagers went to the training institute in Maliwada and are now working as village volunteers. The major educational structure added to the village has been a preschool where 50 children between the ages of three and five are given basic preparation for formal training. A three-day training camp was conducted by Khadi to train young men in construction of Gobar Gas plants and cottage industry initiation. As the women have moved toward getting paid jobs, one of the first forms of training has been in handwriting. Since the farmers needed to see and appropriate modern methods, two agricultural films have been shown in the village and a trip was taken to a demonstration farm in Pune. Recently an agricultural consultant has agreed to live in the village and work with the farmers on upgrading their vegetable quality in order to take up the contract offered by a Bombay hotel.

Community Welfare

Thus far the families, the women and the youth, have benefitted a great deal from the project. The dairy scheme with Union Bank is being prepared to provide initial capital and start up funds for the educated unemployed. Neighbourhood lists have been prepared showing family composition and income in order to monitor care and designate economic benefits. One week's training was given by Alibag nurses to families in keeping the house clean, care for children and construction of soakage pits. The women have become one of the most vital potential resources for raising village income. Seven women went to Thane for training in the wool reclamation industry. Ten women went for Ambar Charkha training. Ten women have been trained in how to approach businesses as well as how to visit and use government offices.

Future Directions

As Chikhale faces its future several tasks are critical: one is the all-weather surfacing of the approach road and an attractive remodeling of the entrance chowk, along with construction of a drainage system. Another is getting the new drinking water well and filtration tank in operation, perhaps with piped water to strategic locations. Making the break with commercial agents and improving the vegetable production in order to take full advantage of the hotel contract is essential.

MALE HUMAN DEVELOPMENT PROJECT

Initiated June, 1977

Baseline Description

The village of Male is located 15 kilometres from Kolhapur on the Sangli Road. It is approached by an all-weather road, three-quarters of a mile long. Regular bus service connects with the nearby towns of Hatkarangale and Ichalkaranji. The adjoining village of Herle, five times the size of Male, feeds into the Kolhapur city bus service, but is unreachable by foot in the monsoon. Although in 1977 Male lacked several of these services. The post office sub-branch is in nearby Chokaki, a primary health centre, two banks, a weekly bazaar and other amenities in Herle are two kilometres away. The village school went up to the seventh standard and was in need of expanded facilities. There was a high school in Rukadi three kilometres distant. Several fine temples graced the village, two in particular being built by separate communities through shramdan also bore witness to the united labours of the villagers who constructed it some fifteen years ago. Of the 1,329 acres making up the project area, 321 were forest land, 109 were irrigated and 674 unirrigated. Major crops grown were jawar, wheat, groundnuts, vegetables and some sugarcane. The latter was a small quantity compared to the high production of sugar in the district. Of the total population of 1,400 some 60 people worked outside Male in clerical, factory or professional jobs, the furthest going to Pune. The dominant Maratha caste were the larger land owners while most of the Harijan community were employed as labourers. Three farmers owned tractors. A sizeable Kumbhar cast maintained a small pottery and brick industry, while Dhangars were seasonally nomadic, looking after sheep and goats. There were two flour mills in the village, two kirana shops, a blacksmith and a carpenter. Some 25 people were classified 'educated unemployed.' A cooperative society and a dairy society had been functioning quite successfully in Male for a number of years, providing loans for increasing the income.

THE ACCOMPLISHMENTS

Cooperative Agriculture

As the water table of Hatkanangale Taluka has dropped in the last five years, many farmers in Male were badly affected. The government has also restricted any new well boring, so the problem of irrigation in Male was acute and could only be solved by a costly lift irrigation scheme; however, since the project began, water permission has been secured for the village and the Canara Bank has begun to process estimates. A local engineer has designed (at no cost) a scheme to irrigate the whole of Male's land. Farmers seminars have been held to enable demonstration plots of brinjal, tomato and hybrid rice.

Appropriate Industry

Since the project began, all the sheep farmers have taken loans to double their herds and are now sending two young men to train in blanket weaving which will double their wool income. In September, 1978, the potters received 1,000 Rs per unit for improving their factories and have begun to form a cooperative to enable the buying of a truck to halve transport costs. A new flour mill has begun for the Harijan community.

Commercial Services

Fifty Harijan labourers have now received 50 buffaloes and seven educated unemployed have taken loans for hybrid, high yield milk producing cattle. One educated unemployed has purchased a tractor through a special government scheme. All of these developments were made possible by close association with the Rotary Club in Kolhapur and the Bank of India, and Canara Bank. Through these agencies loans for the landless and tradesmen have been obtained, and Canara Bank has adopted the village. The Rotary Club paid the interest on the DRI loans.

Living Environment

The Mangs and Harijan communities have started the formation of a housing society to provide Rs 3,000 loans for new homes. New electrical connections have already been made in the Mang community and along the approach road.

Corporate Patterns

The village of Male is a sophisticated, and yet, highly traditional village. Residential involvement has been slow to form, but once formed has been strong and serious. The village administers the preschool, runs the clinic, and sends representatives on all visits to Kolhapur. A new youth club has been registered. The village leaders take a keen and very serious responsibility for the project and meet regularly to plan the next steps of village progress.

Community Identity

A 40 by 20 foot mural of the ideal village was painted behind the village chowk and a garden is maintained in the chowk as a permanent reminder of the vision of the Male village. The streets have been named; a signboard is up; and the preschool has new uniforms. Movies and slide shows have been shown.

Preventive Care

A weekly clinic manned by Rotary doctors has extended basic health care and education to the community. A referral system was set up with city hospitals. Eye, skin, and parasite camps have been completed. Two young men have been trained as health workers and are paid a stipend by the government. Two private latrines have been built and a private gobar gas plant installed. Rough drains have been dug. Six demonstration soakage pits have been created.

Functional Education

With Rotary Club aid, three preschools have been started under the administration of the youth club with over 100 children attending daily and two village teachers trained. Already the village has registered a youth club and re-opened the library.

Corporate Welfare

A recently started women-s sewing class has involved 20 women and thus has formed the core for a ladies club. Women-s health and child care classes have been run by Kolhapur Rotary wives. The Global Women's Forum had 65 participants in Male.

Future Directions

The implementation and completion of the irrigation scheme is the most pressing need in Male. The research and setting up of training and industry for the educated unemployed is another priority. A third necessary direction for Male has to do with housing: the extremely destitute Mang community of 18 houses could receive a government grant for total housing renewal. The design is ready and the registration of a housing society grant is now in process. If the application is approved, this project could be a dramatic sign for the whole village.