

PN. ANN 694/62

4480249

ISN 31907

A PROJECT TO HELP PRACTITIONERS  
HELP THE RURAL POOR  
Case Study No. 9

WORKING WITH TRIBAL PEOPLE:  
THE INSTITUTES AT KOSBAD HILL, INDIA

S. H. DESHPANDE  
VASANT DESHPANDE  
SHARAD KULKARNI

CO-SPONSORS: Financial support for this ICED cooperative international project has been provided by: the Ford and Rockefeller Foundations, the Charles E. Merrill Trust, the Ministry of Cooperation of the Netherlands, the International Planned Parenthood Federation, the United States Agency for International Development and the Save the Children Federation/Community Development Foundation.

Agency for International Development  
Library  
Room 1656 NS  
Washington, D.C. 20523

International Council for Educational Development  
P. O. Box 217 Essex, Connecticut 06426 USA

## CASE STUDIES IN THIS SERIES

- No. 1 THE SAVAR PROJECT  
*Meeting the Rural Health Crisis in Bangladesh*
- No. 2 BRAC: (Bangladesh)  
*Building Human Infrastructures to Serve the Rural Poor*
- No. 3 SOCIAL WORK AND RESEARCH CENTER:  
*An Integrated Team Approach in India*
- No. 4 THE SARVODAYA MOVEMENT:  
*Self-help Rural Development in Sri Lanka*
- No. 5 IPPA YOUTH PROJECTS  
*Improving Rural Family Life in Indonesia*
- No. 6 CBFPS IN THAILAND:  
*A Community-Based Approach to Family Planning*
- No. 7 THE LAMPANG HEALTH DEVELOPMENT PROJECT:  
*Thailand's Fresh Approach to Rural Primary Health Care*
- No. 8 PLANNING FROM THE BOTTOM UP:  
*Community-Based Integrated Rural Development in South Korea*
- No. 9 WORKING WITH TRIBAL PEOPLE:  
*The Institutes at Kosbad Hill, India*
- No.10 BRINGING FAMILY PLANNING TO VILLAGERS:  
*The Philippines Outreach Program*

Copies may be ordered from: ICED PUBLICATIONS  
P. O. Box 217  
Essex, Connecticut 06426 USA

Prepaid Price: \$5.00 per copy (surface postage included)  
Airmail postage extra.  
\$4.00 per copy on orders for five or more



International Council for Educational Development, 1979.

## TABLE OF CONTENTS

	<u>Page</u>
<b>INTRODUCTORY COMMENTARY</b>	
<b>CHAPTER 1 THE PHYSICAL AND SOCIAL SETTING</b>	<b>1</b>
Geography and Ecology	4
The Tribal People (Adivasis) of Maharashtra	7
The Warlis	9
Early Efforts to Improve the Condition of Tribal People	16
<b>CHAPTER 2 EVOLUTION OF THE INSTITUTES</b>	<b>22</b>
The Agricultural Institute (AI)	22
Gram Bal Shiksha Kendra (GBSK)	25
<b>CHAPTER 3 THE AGRICULTURAL INSTITUTE'S PROGRAMS</b>	<b>29</b>
Experimental Efforts to Improve Crops	29
Education and Training	34
Technical and Logistical Assistance to Local Farmers	37
Development Programs	39
Efforts to Improve Family Living	40
<b>CHAPTER 4 IMPACTS OF THE AGRICULTURAL INSTITUTE'S PROGRAMS</b>	<b>42</b>
Irrigation and Agricultural Production	42
Reasons for Limited Agricultural Impact	46
Impact of Better Living Programs	48
The Educational Programs	49
Management Aspects	52
<b>CHAPTER 5 PROGRAMS AND APPROACHES OF THE GRAM BAL SHIKSHA KENDRA (GBSK)</b>	<b>54</b>
Programs for Preschool Children	54
Primary School	55
Night School	56
Work Experience	57
Teacher Training	59
Applied Nutrition Training Program	60
Other Activities	61

		<u>Page</u>
CHAPTER 6	RESULTS OF THE GBSK PROGRAMS	66
	A Quantitative Review	66
	Observations and Impressions	67
CHAPTER 7	A COMMENTARY ON SOME KEY ISSUES	72
	The Agricultural Institute	72
	Gram Bal Shiksha Kendra	79
CHAPTER 8	SOME GENERAL CONCLUSIONS	83

#### MAPS

Map 1	INDIA	2
Map 2	TRIBES IN INDIA	3
Map 3	THANA DISTRICT	5
Map 4	DAHANU KOSBAD BORDI AREA	6
Map 5	TRIBES IN MAHARASHTRA	8
Map 6	KOSBAD AND ITS ENVIRONS	11

## GLOSSARY

<i>Adivasi</i>	Aborigine
<i>AI</i>	Agricultural Institute at Kosbad Hill
<i>Ashram Shala</i>	A residential primary school, part of the Maharashtra Government's policy for spreading education in tribal tracts. There is a farm attached for practical experience.
<i>Balsevika</i>	Woman diplomate in pre-school education
<i>Balwadi</i>	Kindergarten, pre-school
<i>Bhagat</i>	Tribal medicine-man
<i>Bor</i>	A native berry
<i>Gram-sevak</i>	Village Level Worker (VLW), extension agent at the grass roots level
<i>Haldi-kunku</i>	A get-together of women in which Halad-turmeric powder and kunku--a red powder considered auspicious--are applied to the foreheads of women whose husbands are living
<i>Harijan</i>	(Former) Untouchable (Name given by Gandhiji meaning 'God's people')
<i>GBSK</i>	Gram Bal Shiksha Kendra at Kosbad Hill
<i>Kharif</i>	The Southwest Monsoon season, roughly from June to September
<i>Konkan</i>	West-coast strip of Maharashtra
<i>Lakh</i>	One hundred thousand
<i>Pada</i>	Hamlet; small group of huts
<i>Panch</i>	Member of Village Council, a local government organization
<i>Rabi</i>	The second (winter) cropping season after kharif
<i>Sarpanch</i>	Chairman of the Village Council
<i>Savkar</i>	Usually "moneylender" but sometimes "landlord-cum-moneylender," less frequently "landlord," which seems to be the peculiar usage in the Kosbad area.
<i>Tahsil</i>	Also Taluka or Taluq, an administrative division above a village but below a district
<i>Warkas</i>	Uncultivated, grass land
<i>Warli</i>	Particular Adivasi tribal group

Exchange Rate: 8 Indian rupees = US\$1.00 (1978)

## ICED COMMENTARY\*

This is the ninth in a series of case studies under ICED's cooperative international project aimed at helping practitioners to help the rural poor. The practical purposes of these case studies is to unearth significant operational lessons--both positive and negative--from the experiences of selected innovative rural programs that may have value for policymakers, planners, and program operators in all developing countries and external assistance agencies .

This particular report from the State of Maharashtra in India tells the story of two large and highly respected voluntary organizations--the Agricultural Institute (AI) and the Gram Bal Shiksha Kendra (GBSK)--whose roots go back to the Independence Movement and its humanistic Gandhian principles. These organizations, along with their wider-ranging activities, have been working devotedly for more than 20 years to help their *Warli* tribal neighbors around Kosbad Hill to extricate themselves from their age-old bondage of exploitation, cultural isolation and dehumanizing poverty. The case study focuses on this particular aspect of their overall programs.

It would be difficult to find anywhere a rural poverty situation more severe or more resistant to change than that of the *Warli* tribals in the Kosbad area. But it would also be difficult to find in the real world any organizations better suited by commitment and competence to tackle such a hard case. Consequently, anyone concerned with improving the lot of the rural poor in India or any other developing country will find this a highly instructive--if somewhat disquieting--story.

The story is told by three knowledgeable Indian social scientists--an agricultural economist, a sociologist, and a student of Indian tribal life. Their research plan was shaped in cooperation with ICED's own Indian staff member, Pratima Kale, a broad-gauged educational sociologist well acquainted with voluntary organizations in India, during an initial joint visit to Kosbad. Subsequently, the authors made further visits to observe various programs in action, to survey and assess the impact of these activities, and to conduct extensive interviews with the leaders, staff members and students of the two institutes and a sample of *Warli* farmers and other local people. As social scientists, the authors kept in check their strong sympathy and

---

\*Prepared by Philip H. Coombs, director of ICED's international project of which this case study is a part.

respect for the leadership, aims and achievements of these institutes, and their deep compassion for the Warli tribal people themselves, and produced a highly objective and critically analytical report. Others may disagree with some of their interpretations and conclusions, but few would deny that they have given us a very substantial and stimulating account.

### KEEPING THINGS IN PERSPECTIVE

Two important caveats should be borne in mind in reading this case study in the interest of keeping a proper perspective and reaching a fair assessment of the record of the two Kosbad institutes.

First, it should be emphasized the authors did not attempt to examine and evaluate the total activities of the two Kosbad institutes but only that part directly involving the relatively small tribal population in their immediate vicinity. Therefore the findings should not be misinterpreted as applying to their sizeable outreach activities that extend throughout the State of Maharashtra and to other parts of India.

It should be noted with respect to these broader activities that the Agricultural Institute has earned an outstanding nationwide reputation for the high quality of its training and research activities and especially for its wide-ranging promotion of significant agricultural innovations. Its principal, Jayant Patil, for example, was recently awarded a national prize for innovative work on irrigation wells. The Gram Bal Shiksha Kendra has similarly earned an outstanding national reputation for its creative and influential work on preschool children and on nonformal education for older children, which has had a wide influence through its teacher training activities and professional publications. Anutai Wagh, its principal, has long been widely respected--one might even say revered--for her pioneering work and leadership in the field of early childhood education, especially for disadvantaged rural children. This, in brief, is the broader record of achievement of these institutes against which the findings of the case study should be viewed.

The second caveat concerns the historical roots of these institutions and the contrast between the earlier social and educational reform approach of the Independence Movement and today's broader and more sophisticated "community development" approach. The earlier ideology (which still dominates the strategy of many older voluntary organizations in India) was paternalistic in approach and gave almost exclusive emphasis to education and social improvement as the key to "uplifting" the rural poor. Thus, it gave relatively little attention to attacking the economic roots of poverty or to promoting extensive "community participation"--two elements that have since acquired central importance in contemporary "community development" doctrine, reflecting the deeper understanding that has developed over the years of the causes of poverty, the psychology of the poor, and the basic prerequisites for reducing rural poverty. Not surprisingly, therefore, the earlier ideology is often criticized today by Indian rural development experts for being too narrow,

unrealistic and paternalistic. Yet few would deny that its dedicated workers deserve great credit for having sensitized the urban educated elite to the vast injustices in the prevailing socioeconomic system, and for creating a political climate favorable to numerous legislative actions and public policies aimed at rectifying these long-standing inequalities and injustices.

It is important to read the case study in the light of this historical perspective so as to avoid the error of judging the performance record of the Kosbad institutes solely in terms of the sophisticated criteria of today's community development thinking. These institutes must be seen for what they are: a blend of the old and the new. Being rooted in the soil of the old social and educational reform movement, they benefit from its considerable strengths and also suffer to a degree from its limitations. But unlike many of the older voluntary organizations, they have broken out of the old mould. The Agricultural Institute, for example, has adopted a strong agricultural development approach, and the Gram Bal Shiksha Kendra has been endeavoring to shed its paternalistic heritage for a more community-based approach; yet neither entirely fulfills the prescription of the modern community development approach.

#### THE OBJECTIVES AND PROGRAMS

The basic objective of the Agricultural Institute (AI) when it set up its Agricultural School in Kosbad in 1949 was to train modern young farmers, both tribal and nontribal, throughout the Thana District--a coastal district north of Bombay stretching 113 kilometers along the Arabian Sea. Gradually AI took on a broader range of training tasks and clientele covering a much wider geographic area. Today, for example, it runs special training centers for Village Level Workers, tribal youth, village council chairmen and members, ordinary farmers, and applied nutrition workers. In addition it operates two residential primary schools and a middle school, all with a strong agricultural bias.

The Institute has also evolved a wide-ranging agricultural research program that focuses on the ecological potentials of its service area and feeds into its training activities. Its experimental and promotional activities have included, for example, high yielding varieties of rice and wheat; the introduction of new fodder grasses, fruits and vegetables; and improved breeds of milk cows, goats, and chickens, as well as bee-keeping.

Although a substantial majority of the Agricultural Institute's overall clientele is made up of non-tribal farmers, it has for both historical and locational reasons taken a special interest in the *Adivasi* (a general term covering all "Scheduled Tribes" in India), and particularly in the Warlis who inhabit its immediate neighborhood and are among the poorest and most disadvantaged of all the tribal groups in Maharashtra. Of primary interest to this case study is the multi-pronged Development Program the Institute has been conducting in several "adopted" Warli villages within a radius of 10 km. of Kosbad with a total population of some 750 families. A central aim of this development program has been to introduce a multi-crop, year-round

agricultural system, based on improved irrigation, to replace the traditional mono-culture system that occupied only the rainy season and left small Warli cultivators with little food supply or gainful employment during the long dry seasons. In an effort to break the critical water bottleneck, the Institute, with substantial financial aid from international voluntary organizations, constructed 100 dug wells for selected individual farmers and a number of community wells to be shared by several farms, at almost no cost to the farmers. It has also supplied them with seeds, cuttings for fruit tree grafting, and other supplies, and with training sessions, demonstrations and extension services to teach them how to apply these improved agricultural and horticultural technologies. On top of all this, the Institute's own staff and students have frequently done the Warli farmers' work for them.

As a supplement to the development program, the Institute also mounted a "Better Living Program." This has included the introduction and promotion of such devices as smokeless stoves, glass roof panels, sanitary latrines and Gobar Gas plants, all designed to improve household hygienic conditions and to convert waste into much needed manure and fuel.

The neighboring Gram Bal Shiksha Kendra (GBSK) is basically an educational institution whose work has been complementary to the Agricultural Institute's program. GBSK moved into a virtual educational desert when it came to Kosbad in 1957. Ever since it has concentrated its efforts primarily on the education and general welfare of preschool age children, in the conviction that if children born into dire poverty are to have any real chance in life, they must be given crucial help in their early formative years. And since its principal had already made her mark as a creative national leader in preschool education, GBSK soon became a respected national center for the training of preschool teachers, especially for Adivasi children, in other rural areas of India as well.

Inevitably, because of the sparsity and moribund character of elementary schooling in the Kosbad area, and the almost total non-participation of Warli children, the GBSK was soon drawn into primary education as a follow-up to its pre-primary work. Though the main core of its primary education takes place in regular schools, some of its most interesting and innovative ventures have been with "meadow schools" and "night classes" on plantations for working children unable to attend school, yet anxious to learn.

## THE RESULTS

It should be evident even from the above very abbreviated sketch of their activities that the two Kosbad Institutes have made a diversified and persistent effort, extending over 20 to 30 years, to uplift their Warli neighbors. The question the case study investigators sought to answer was: What have been the practical results? What discernible impact have all these efforts had on the agricultural practices and productivity of the Warlis; on their traditional beliefs, attitudes and behavior; on the development and upward mobility of their children; on their community cohesion, cooperation and

participation; and on the general quality of their family life?

The short answer--which is elaborated and documented in the report--is that there have been significant results, including a number of outstanding individual "success cases"; yet, taken overall, the impact must be judged as disappointingly low, at least in terms of earlier expectations and what one might reasonably have anticipated.

The GBSK's educational work with young children and mothers has clearly yielded some good results. The strong earlier resistance of mothers to permitting their children to attend the creches, balwadis and elementary schools has melted away. Many mothers today are not only willing but anxious to send their children to school, and the children arrive much cleaner than they used to. The attitude toward education has discernibly changed. And some of the children--though still only a small minority--have climbed further up the education ladder. A number of the teen-agers interviewed, particularly the girls, reflected a new freedom from some of the confining and stultifying traditional beliefs and attitudes of their tribal culture, and a critical view of some of the less constructive behavior of their parents, such as excessive drinking.

Despite these encouraging advances, however, the overall progress has been limited and there is still a long way to go. The old cultural barriers and constraints are still strong; even the educated Warlis still display a lack of self-confidence and a tendency to withdraw. Although GBSK has "reached the poor" and gained their acceptance, it has apparently had little success as yet (though not for lack of trying) in stimulating active community participation and direct involvement in the operation of its activities. It seems particularly significant that although a number of tribals are employed by GBSK as farm workers and office peons, none has ever applied for a position as office clerk and only one among nine elementary teachers is an Adivasi.

Changes on the agricultural front are, of course, more tangible, visible and measurable than with education. The case study investigators conducted a revealing survey of 45 farms run by the only Adivasi farmers actively using any of the 100 individual dug wells referred to earlier. Since they are undoubtedly "above average" farmers in the area, any agricultural revolution that may have occurred would undoubtedly be apparent in their fields. But there has not as yet been any real agricultural revolution. Nor could the case study investigators find much evidence that the innovations under the "Better Living Program" had taken hold. There have been, however, some significant breakthroughs in terms of crop diversification through the adoption by these selected Warli farmers of non-traditional crops--especially various fruits and vegetables that improved their cash incomes.

The investigators concluded, however, that the Agricultural Institute's three-cycle year-round agricultural scheme had not succeeded. For the first (rainy season) cycle most of the 45 farmers, though they had adopted the recommended high yielding rice varieties

on a limited scale, were still devoting more than two-thirds of their paddy acreage to the old low yielding local varieties (which yield less than half as much). The wheat the AI had enthusiastically promoted for the next cycle was even less popular, though as indicated above, fruits and vegetables were proving more popular. The adaptation of new types of livestock and sideline activities such as bee-keeping, on the other hand, appeared to have made little headway.

### EXPLANATIONS AND POSSIBLE SOLUTIONS

If significant lessons for the future are to be drawn from this rich and lengthy experience, it is necessary to try to understand the causes of both the successes and the failures. This, of course, is the hardest part of such a case study because various causal factors are often so intertwined that it is difficult to sort them out and weigh their relative importance. In the end it becomes a matter of judgment, and frequently there is wide scope for differences of interpretation and opinion.

Thus, for example, the farmers and the AI experts had conflicting explanations for the relatively low impact of the agricultural development program. The farmers explained it largely in terms of adverse technical and economic factors, such as inadequate water supply, the low-moisture retention of their light soils, and the prohibitive cost of the heavy fertilizer applications required for HYVs. The AI experts on the other hand minimized these technical-economic explanations and tended to attribute the low impact primarily to the irrational fears and other idiosyncracies of the Warlis. They dismissed as groundless, for example, the farmers' assertion that "the rains wash away the fertilizer"; they pointed out that AI had always been ready to provide credit for the purchase of fertilizer, that the farmers did not always fully utilize their available water supply, and that AI's theoretical cost calculations demonstrated clearly that the farmers could greatly enhance their income if they adopted AI's recommended innovations. The Warlis, it was said, are good workers but poor farmers; they prefer to work on a large plantation for immediate cash wages rather than cultivate their own small farm more intensively and ultimately realize a larger income.

It is impossible to judge from a distance, of course, where the real truth lies in this particular debate, but it is perhaps worth noting that ICED has encountered quite similar debates between non-tribal small farmers and agricultural experts in numerous other areas, suggesting that it may not be simply cultural idiosyncracies that so often cause the small farmer to reject new agricultural technologies advocated by the experts. Frequently the farmer turns out to have his own rational reasons for treating innovations with extreme caution, usually having to do with his meager resource base, his imperative family consumption needs, the unpredictability of the weather and market prices, and his very limited capacity to take risks. It also involves his weighing of available alternatives--such as spending more hours working his own land in hopes of getting a possibly larger but postponed income, as against working more hours on somebody else's larger farm or taking some other available employment for

immediate though meager cash wages. Seen in this light, the small farmer often more closely approaches "the rational economic man" than some of the technical experts who advise him. Their cardinal goal, after all, is increased yield per acre; his is survival.

This is not to suggest that the inherited cultural traits of the Warlis (described in Chapter 1) were not also an important explanatory factor in the relatively low impact of AI's development program. What seems clear from the evidence is that a wide social distance and communication gap still persists between the Warlis and the mainly middle class educated people who seek to help them. Such a gap is, of course, found in poor villages all over the world, but in the case of the Warlis it is exceptionally wide because of their long and continuing (partly self-imposed) cultural isolation. The key problem--to which the Kosbad institutes (and many others) have evidently not yet found a satisfactory solution--is how to close this gap. For until it is closed, or at least substantially narrowed, all sorts of development interventions from the outside are likely to have a low impact, and all the talk about "community participation" is likely to have a hollow ring.

In view of the importance of these frequently neglected social and cultural obstacles to rural development, the authors make a fundamental point when they suggest that, to be effective, technical agricultural research should be accompanied by appropriate social science research. Or to put it differently, he who would help the poor must first know them, and understand how life looks from *their* vantage point. One must also respect their judgment, for the very fact that they have survived this long under seemingly impossible circumstances suggests that they are not entirely without wisdom and rationality, even though they may be illiterate and some of their beliefs, fears, and practices may be baseless and counterproductive in the light of scientific knowledge.

With respect to the evident lack of "community participation" by the Warlis in the activities of the two institutes, and their seeming indifference toward advancing themselves, the authors note that the approach of the institutes has been strongly paternalistic and that this may have discouraged a sense of self-reliance. They question, however, as other observers have before them, whether a more community-oriented, self-help approach would have been feasible in the circumstances. Perhaps people must be helped out of the worst depths of poverty in paternalistic fashion before they are ready to become their own change agents.

But here the authors encounter something of a chicken-and-egg dilemma. On the one hand they conclude that education is the only real means of altering the traditional beliefs and attitudes of the Warlis and making them self-reliant. Yet on the other hand their findings suggest that the long and extensive educational efforts of both institutes, although helpful in other respects, do not seem as yet to have made any sizeable dent in this respect. Their answer to this seeming dilemma is that the institutes should give much greater emphasis to the consciousness-raising kind of education that will make

the learners--particularly the younger ones--more aware of their socioeconomic and political environment, of the basic causes of their exploitation and poverty, of the strengths and weaknesses of their own inherited culture and traditions, and of their own capacity and innate human power to change this environment and their position in it. In advocating more "consciousness-raising" education, however, they caution against a purely agitational approach that can be counter-productive, "to the extent that it makes the clientele believe that all their ills flow from sources outside themselves." They also recognize that the necessary educational approach is at best a long slow process with no quick and dramatic pay-offs.

The authors do not take the position, however, that a purely educational approach will suffice. On the contrary, they conclude that the program objectives of the Kosbad institutes have been too limited in terms of the basic needs, interests and potential motivations of the Warlis, and that even within these objectives the various activities have been too fragmented. They observe, for example, that while each of the innovative devices for improving family living could be justified in its own right, these devices were of only marginal importance to meeting the basic family needs of the Warlis. They suggest instead that AI's agricultural recommendations might have greater acceptance and success accompanied by a primary health care program attuned to the critical health needs and problems of the area. One might also surmise that the Warli mothers would respond with some enthusiasm to well conceived activities designed to reduce their physical burdens, to help them earn some crucially needed cash, and to elevate their status and self-respect.

To ask such a broader and more integrated approach of these two institutes, of course, may be to ask the impossible, for it would confront them with a difficult choice between continuing to concentrate on what they are so unusually well qualified to do, or taking on additional new functions (such as health care, non-farm occupational training, and family planning), which would probably force them to concentrate their attention and limited resources on serving a more limited audience and geographic area. The point is nevertheless an important one for other rural programs, especially newer ones still in the planning or early development stage, or for older ones that may be able to form close partnerships with other organizations capable of rendering complementary family improvement services in the same area.

#### FOUR BASIC CONCLUSIONS

Viewed in a broad international perspective, the experiences of the Kosbad institutes over more than 20 years reinforce the following important conclusions of wide applicability that have also emerged from other case studies in this series.

First, even the best conceived technical solutions to poverty problems can be thwarted by deep-seated social and cultural factors and by human communication barriers unless effective ways can be

found to overcome these obstacles. In other words, in order for beneficial material changes to occur, the perceptions, attitudes and outlook of the people themselves must change. Thus, the diagnosis of rural poverty situations and the successful planning and implementation of corrective measures calls not only for technical expertise in such fields as agriculture, irrigation, health and education but also for the insights of such social scientists as cultural anthropologists, rural sociologists and social psychologists. Thus far, comparatively little use has been made of such social science expertise in attacking the problems of rural poverty.

Second, although rural poverty situations differ considerably from one to another, they almost invariably require a multi-pronged approach addressed to a combination of the basic needs of the individuals, families and communities concerned. A single-sector approach--as for example in agriculture--is likely to be far less effective by itself than as if accompanied by parallel efforts directed at such needs as health, nutrition, maternal and child care, family planning, and off-farm employment. And for each of these efforts to succeed, it must include appropriate educational (i.e., *learning*) components, closely integrated with all other components--which is to say that education should be seen not as a separate "sector" unto itself but as an essential nutrient and lubricant of *all* development activities.

Third, achieving sizeable improvement in rural poverty situations requires fundamental social, economic, cultural and political changes in the local environment. This is a considerably more complex, difficult and time-consuming process than is often assumed, particularly by external assistance agencies that place their faith in neatly packaged, narrowly-focussed three to five years "projects." There is urgent need to find more effective alternatives to this conventional "project approach" in the whole area of rural development.

Finally, voluntary organizations, because of their unique flexibility and capacity to innovate and test out fresh approaches, and because of their potential for attracting able and dedicated leadership and staff who can get close to the rural people and articulate their needs and interests, can be a crucially important supplement to larger scale governmental efforts. But to perform this role most effectively they must (1) have a broad development orientation; (2) be permitted to retain a substantial degree of independent control over their own programs; and (3) receive sufficient *general* and *continuing* financial support from both domestic and international sources--not simply short term "project support" restricted to some limited purpose of special interest to the donor.

## ACKNOWLEDGEMENTS

It is my pleasure to end this commentary by expressing ICED's thanks for a job well done to the three men who produced this case study: *Dr. S. H. Deshpande*, Professor of Agricultural Economics at the University of Bombay and author of *Problems of Cooperative Farming* and numerous journal articles; *Dr. Vasant Deshpande*, Director of the Nehru Institute of Social Studies at Pune and author of *Towards Social Integration: Problems of Adjustment of Scheduled Caste Elite*; and *Sharad Kulkarni*, Director of the Centre for Tribal Conscientization at Pune and author of numerous articles on tribal problems.

It is my further pleasure to express ICED's sincere gratitude to the leaders and members of the Agricultural Institute and the Gram Bal Shiksha Kendra, and to all others who were so helpful in getting this important Kosbad story told. To be more specific, I would like to associate ICED with the following statement of gratitude and acknowledgements prepared by the authors themselves.

We are thankful to AI and GBSK for their unstinted co-operation in every way. Particular mention must be made of Anutai Wagh, Jayant Patil, Avinash Chaudhary, Appa Koske, M. S. Gupte, A. H. Sankhe, Dr. N. V. Modak and Anna Amrite. For special interviews we are grateful to K. J. Save (author of *The Warlis*), H. G. Patil (the first Head of AI), K. M. Chitre (life-long associate of Acharya Bhise) and Principal N. G. Joshi (of the R. M. Bhat High School). Mrs. Padmaja Phatak, grand-niece of Tarabai Modak, made available to us the manuscript of her *Life of Tarabai* (Marathi). We have relied more on the writings of the Nargolkars (*Jangalche Raje*) and K. J. Save (*The Warlis*), than our references indicate. S. A. Kelkar's books, *Taraba va Balshikshan* (*Tarabai and Child Education*) and *Gramin Bal Shikshanache Prashna* (*Problems of Rural Child Education*), were equally useful. Prof. Vidyadhar Amrite got the maps done. We record our grateful thanks to all these. Finally, we must state our deepest appreciation of the Warli farmers, students and others without whose co-operation our study would have been impossible of achievement.

## CHAPTER 1

### THE PHYSICAL AND SOCIAL SETTING

The Agricultural Institute (AI) and the Gram Bal Shiksha Kendra (GBSK) have been working since 1949 and 1957 respectively on Kosbad Hill, situated in a tribal area of Maharashtra (see Map 1). AI's work has extended over research, education, training, extension, and development. Its educational activities, however, include more than purely agricultural education. The principal focus of GBSK's work has been on preprimary and primary education and the teacher training that is associated with both. Work of tribal uplift is only *one* part of AI's totality of activities, whereas it constitutes almost the whole of the activities of the GBSK.

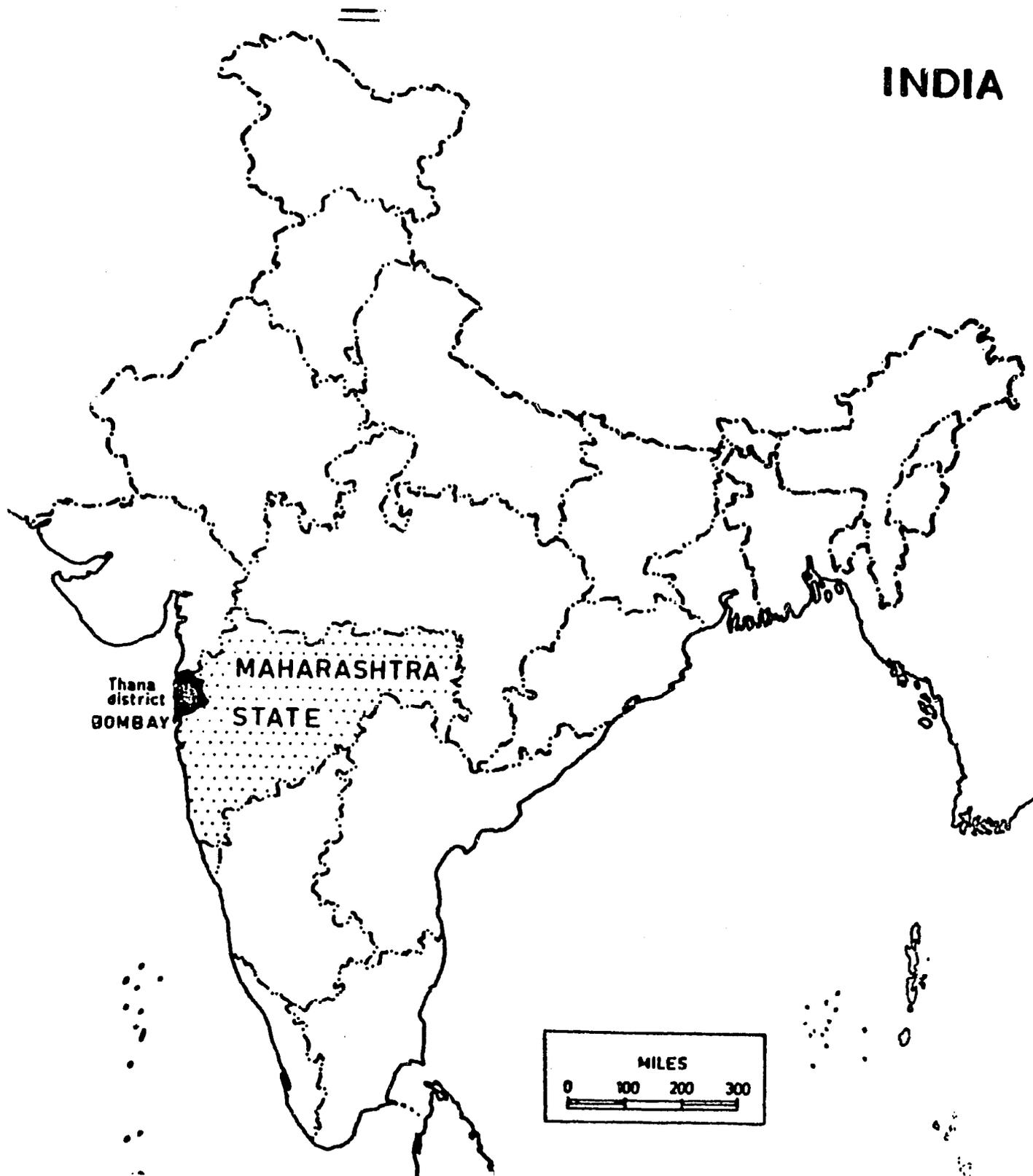
It should be noted that these institutes have been working *in* a tribal area and *for* tribal people. Tribals, of course, are rural people, but they are a special kind of rural people because of the cultural gap that separates them from others. Consequently, they tend to present certain special problems of development, not met with, or not met with to the same extent, in other rural populations. The tribals, officially designated as the "Scheduled Tribes" in India, and called "Adivasi" generally, constitute seven percent of the total population. (See Map 2.) Hence, lessons learned from these tribal programs may have relevance and value for other tribal areas in India or in other countries.

The area in which the two Institutes have been working has had a long history of the worst kind of poverty and exploitation, although in recent years its rigors have diminished. The development problems of part of this area revolve around exceptionally rugged soil and water resources in a hilly part of the land that raises special problems of its own, although hill agriculture is not exclusively tribal agriculture.

These Institutes are essentially voluntary, and yet they seem to differ markedly from other kinds of voluntary rural development agencies currently working in Maharashtra. The latter generally work on a much smaller scale, in terms of areas or population served. In many cases they are the creations of single individuals with at the most a few local or outside collaborators. They have an accent on "self-less" service which in practical terms means that the workers generally live a simple life and keep their own requirements to a minimum. The Kosbad Institutes' scale of operations is much larger

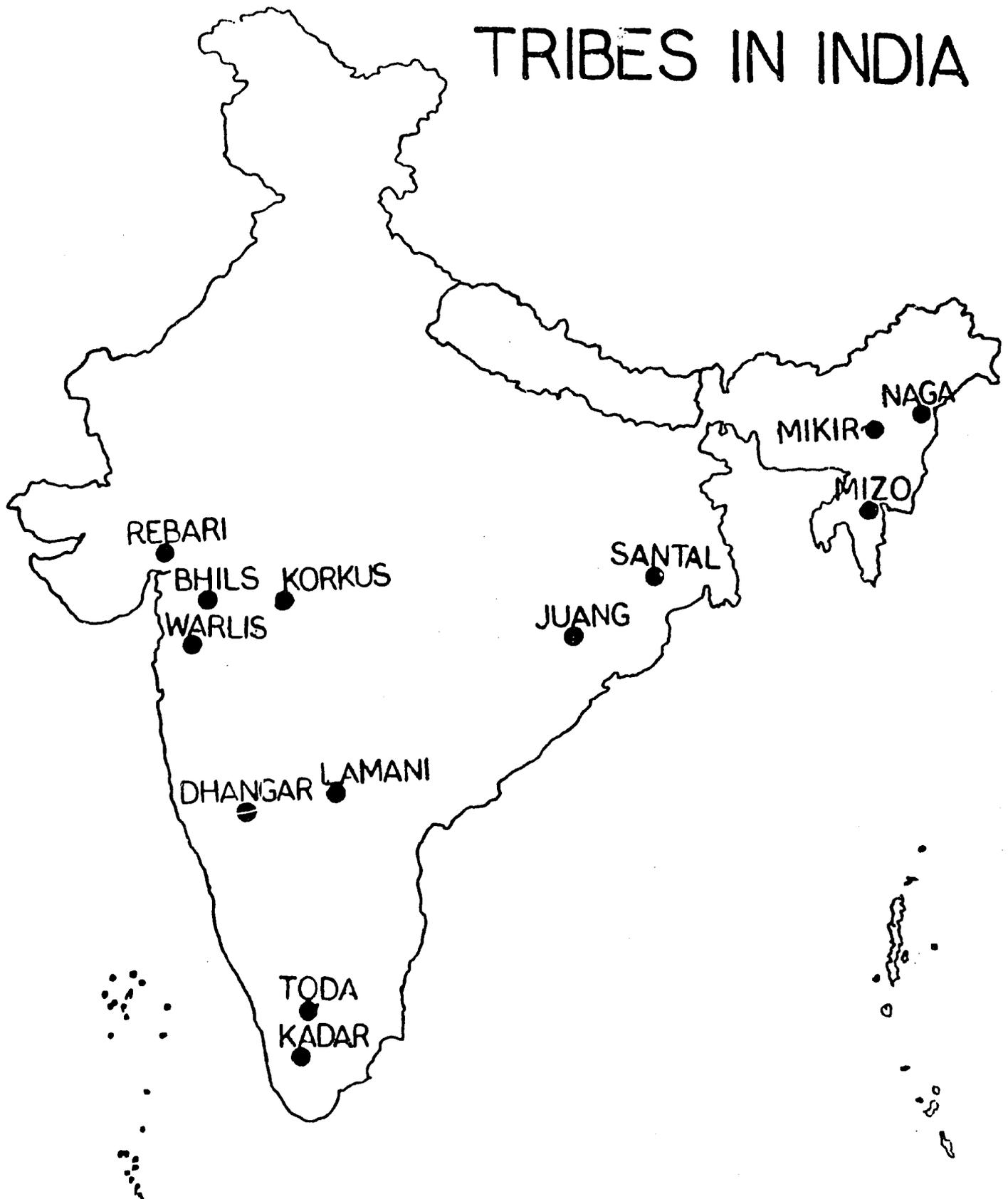
MAP 1

INDIA



MAF 2

# TRIBES IN INDIA



than the average and, being educational institutions subject to government grant-in-codes, have all the usual organizational trappings, such as differential pay scales, hierarchy of statuses, and minimum security of service.

Even though this research study can be regarded only as a beginning, since all potential aspects of the subject have not been treated, it is believed that its findings have some firmness and validity because of the fairly long span of time the Institutes have covered: AI--30 years, GBSK--22 years.

This initial chapter describes the ecology of the geographic area and the characteristics and conditions of the tribal people examined by the study.

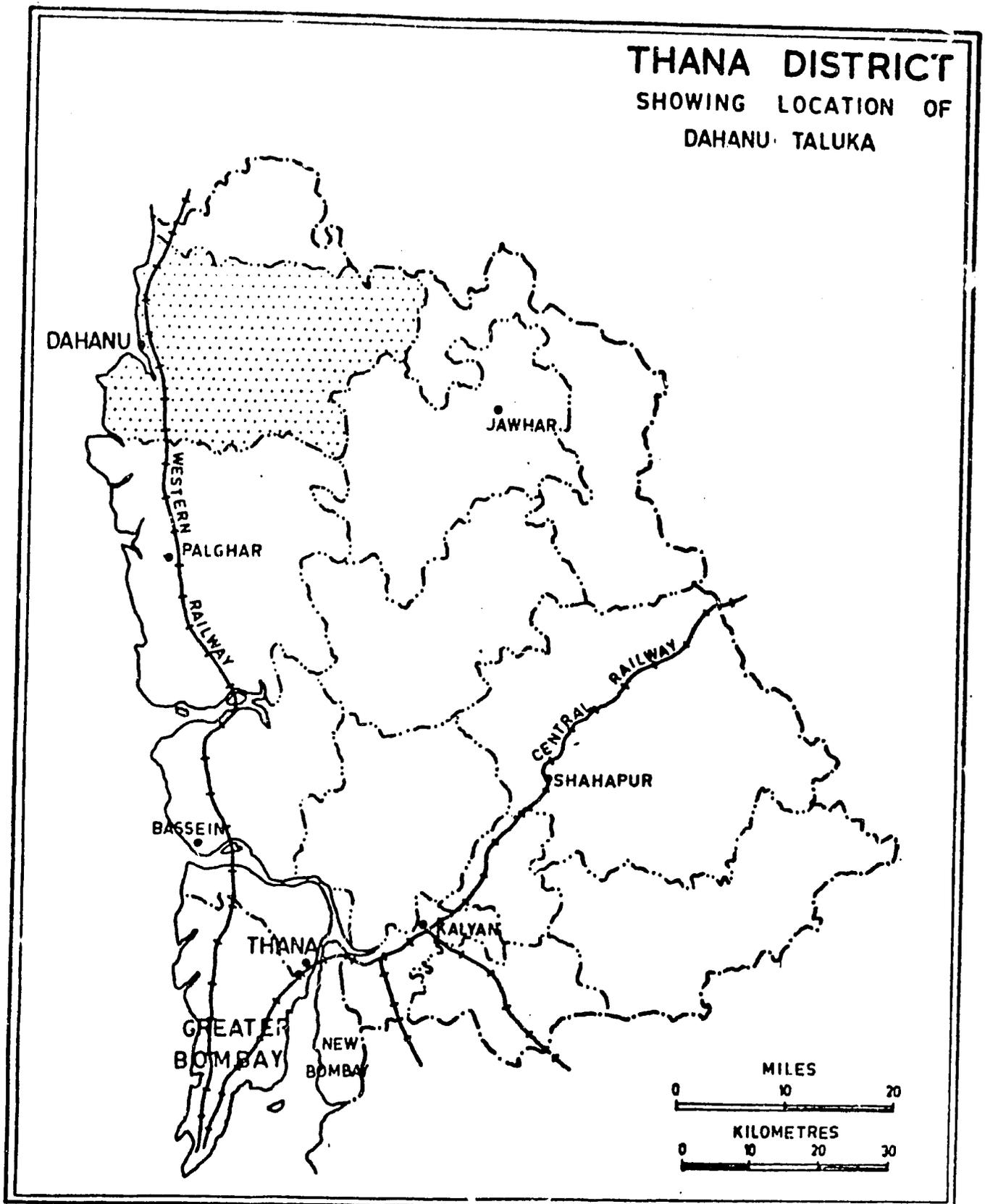
### GEOGRAPHY AND ECOLOGY

Kosbad Hill, from which the Kosbad Institutes operate, falls in the Dahanu tahsil (sub-district) of the Thana District in Maharashtra. (See Map 3.) Thana District, lying north of Bombay along the coast of the Arabian Sea for 113 kilometres, is divided into three topographical zones: (a) the central portion of the Sahyadri ranges and their slopes, which is mainly forest area, (b) the eastern part, mainly paddy fields, and (c) the western plains along the coast where rice, horticulture, fodder, and vegetables are grown.

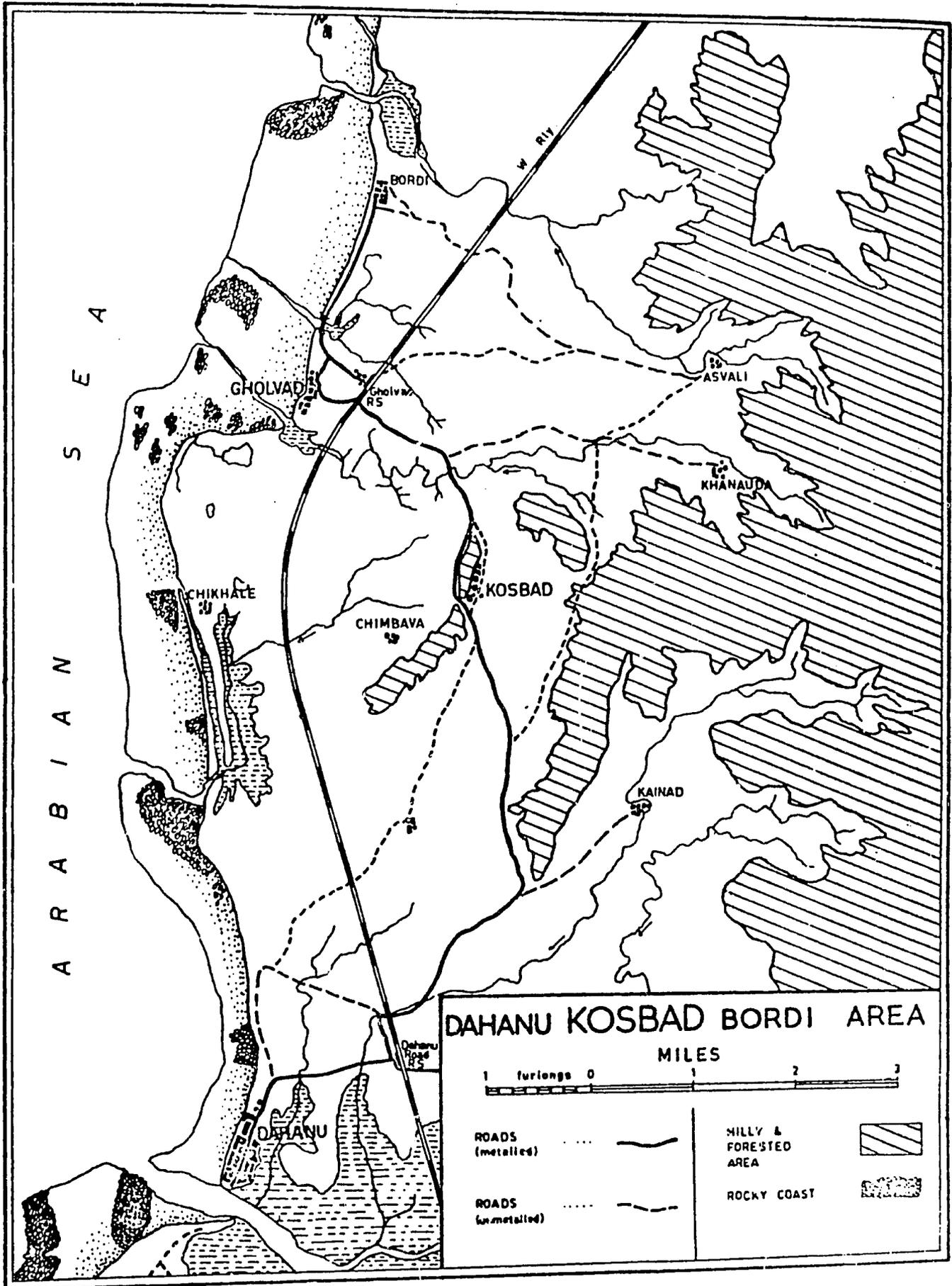
Dahanu tahsil is a coastal tahsil. (See Map 4.) Of the three topographical divisions mentioned, it has two coastal plains to the west and hilly areas to the east. The soil of the western coastal strip is fertile and therefore favorable for horticulture, paddy, and vegetables. The climate is warm and humid with very small variations in temperature. The annual rainfall varies from 2000 to 2500 mm. and comes chiefly from the south-west monsoon, June to September. Underground water resources vary from one area to another but are generally meager.

The agricultural and forestry potential in the areas around Kosbad is considerable. Rice soils can facilitate the introduction of high yielding varieties. A second crop of pulses can be taken on some lands on the residual moisture in the *rabi* (winter) season. The hilly terrain with laterite soils is excellent for horticultural crops such as mango, cashew, and jackfruit; and the grasslands may be made to produce nutritive grasses. By applying the silvi-pastoral concept farmers can produce fodder on forest lands, and the availability of fodder can lead, of course, to meat farming. The waterlogged areas at the foot of hills can be transformed into ponds for fish culture. Forest wealth can be utilized for starting village industries like basket-making from bamboos, cardboard from coarse grasses, tusser silk from Ain trees, gums, and resins. The flora can be utilized for beekeeping. The date palm trees can be tapped for Neera, a nutritious drink, and the leaves can be used for making brooms and carpets. In the region covered by about

MAP 3

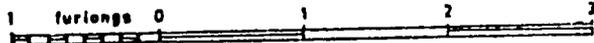


MAP 4



DAHANU KOSBAD BORDI AREA

MILES



ROADS (metalled)

ROADS (unmetalled)

HILLY & FORESTED AREA

ROCKY COAST



ten villages around Kosbad there are 10,000 trees of *deshi* (native) mangoes and 20,000 *bor* plants (a native berry). By grafting improved varieties these can be made to produce much larger than normal yields.

On the other hand, there are hardly any mineral resources in the area. Most opportunities for development lie in the direction of exploiting the agri-horticultural lands, grass lands, forests, fisheries, and the subsidiary small industries that are based on these. Water, however, is a critical bottleneck to exploiting these opportunities.

#### THE TRIBAL PEOPLE (ADIVASIS) OF MAHARASHTRA

Since both the AI and the GBSK have been working in a tribal (Adivasi) area and in a significant measure for the particular tribes called "Warli," it is desirable at the beginning to provide a brief account of Adivasi life in general and of the Warlis in particular.

The Scheduled Tribes (*i.e.*, Adivasi) population of Maharashtra may be estimated at four million as of 1979 or about six percent of the total state population. Most of them (about 95 percent) live in rural areas.<sup>1</sup> They are, thus, predominantly rural and live for the most part in the hilly areas of the Sahyadri-Satpuda and Gondwan ranges. (See Map 5.)

Most of the Adivasis are small cultivators. About 30 percent of them cultivate less than one hectare, as against 21 percent among the general cultivators. About 64 percent cultivate less than 3 hectares, as against 51 percent among all cultivators in the State.

Most Adivasis live in the hilly areas of the State; lands cultivated by them are less fertile than those owned by nontribals. Most of these lands are devoid of irrigation facilities, and even among those having irrigation facilities the majority have wells that rarely supply water throughout the year.

The economic and technological plane on which the Adivasis live is quite primitive. Division of labor is so meager that the economic structure shows an almost total absence of village industry. The traditional Indian village, however backward, boasts a complement of village artisans supporting the agricultural economy and catering to the consumption and ceremonial needs of the villagers, but tribal villages show little evidence of village crafts. Agricultural implements are generally more primitive than in traditional plains villages.

Adivasis are also educationally backward as compared to non-Adivasis. In the 1971 Census, only about 11 percent of them were

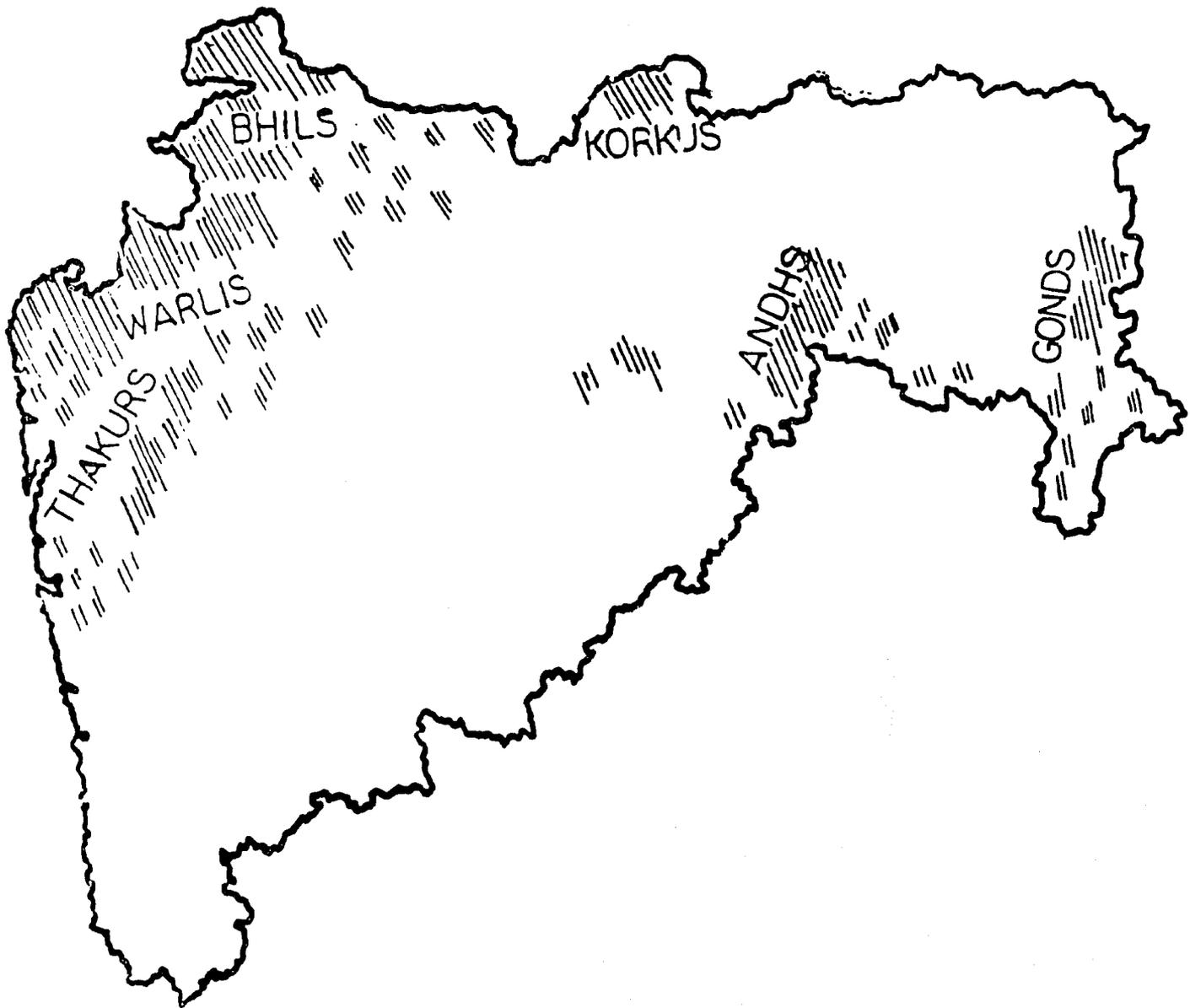
---

<sup>1</sup>The corresponding percentage recorded for the general population of the State in 1971 was 68.

MAP 5

---

# TRIBES IN MAHARASHTRA



recorded as literate, as against 31 percent among the general rural population. The rate of literacy among Adivasi males was 18 percent, and among females 2 percent. Of the literates among Adivasis in Maharashtra, only 2.7 percent had completed the primary stage of education, and only 0.5 percent had completed the Secondary School Certificate Examination.

The education of Adivasis is far behind that of the general population. Most primary schools in Adivasi areas are one-teacher schools. The average number of students in Adivasi areas is 67 per primary school and 260 per secondary school against an average of 145 and 320 respectively in the non-Adivasi areas. The average number of students in the primary schools in the State is 12,112 per lakh (per one hundred thousand) population; in the Adivasi areas it is only 7,626. The average number of students in secondary schools is 4,230 per lakh of population in the State, whereas in tribal areas it is only 2,217. The above figures of Adivasi students must probably be taken with a large pinch of salt; they do not reflect real attendance. In the State as a whole there are ten secondary schools per 100,000 population, whereas in Adivasi areas there is only one secondary school per 100,000 population.

The common characteristics of Adivasi life in Maharashtra, as in India generally, are their belief in ghosts and witchcraft, their addiction to drink, a relatively relaxed (by our standards) moral code regarding sex and marriage, a fondness for song and dance, a carefree attitude to life, and a pervasive "laziness."

Most Adivasi tribes have suffered greatly as a result of contact with "civilization": land seizure, exploitation through tenancy, usury, trading, and forced labor; frequent beatings, woundings, and torture of the helpless; poverty, malnutrition, degradation, and virtual slavery. All these have marked their recent history, and in consequence they entertain a great suspicion and fear of the outsider and try to withdraw into themselves.

Most of these traits may be found to exist among the Warlis.

## THE WARLIS

### *General Characteristics*

The Warlis constitute slightly less than ten percent of the total Adivasi population in the State, but they are the largest Adivasi tribe in the area in which AI and GBSK are working. The total Scheduled Tribes population in the Thana District in 1971 was 579,538 persons out of the total population of 2,281,664 persons; *i. e.*, between 25 and 26 percent. In Dahanu tahsil, in which Kosbad is situated, the percentage of the Scheduled Tribes population to total population was 64.93 in 1971.

The main Scheduled Tribes found in the Thana District are Warli, Malhar Koli, Thakur and Kathodi; Warlis form the major group and constitute about 40 percent of the Scheduled Tribes population of the district. In the Dahanu tahsil, or taluka, Warlis form the majority of the Scheduled Tribes population and also of the total taluka population. In the villages and padas (hamlets) around Kosbad they amount to 80 percent. (See Map 6.)

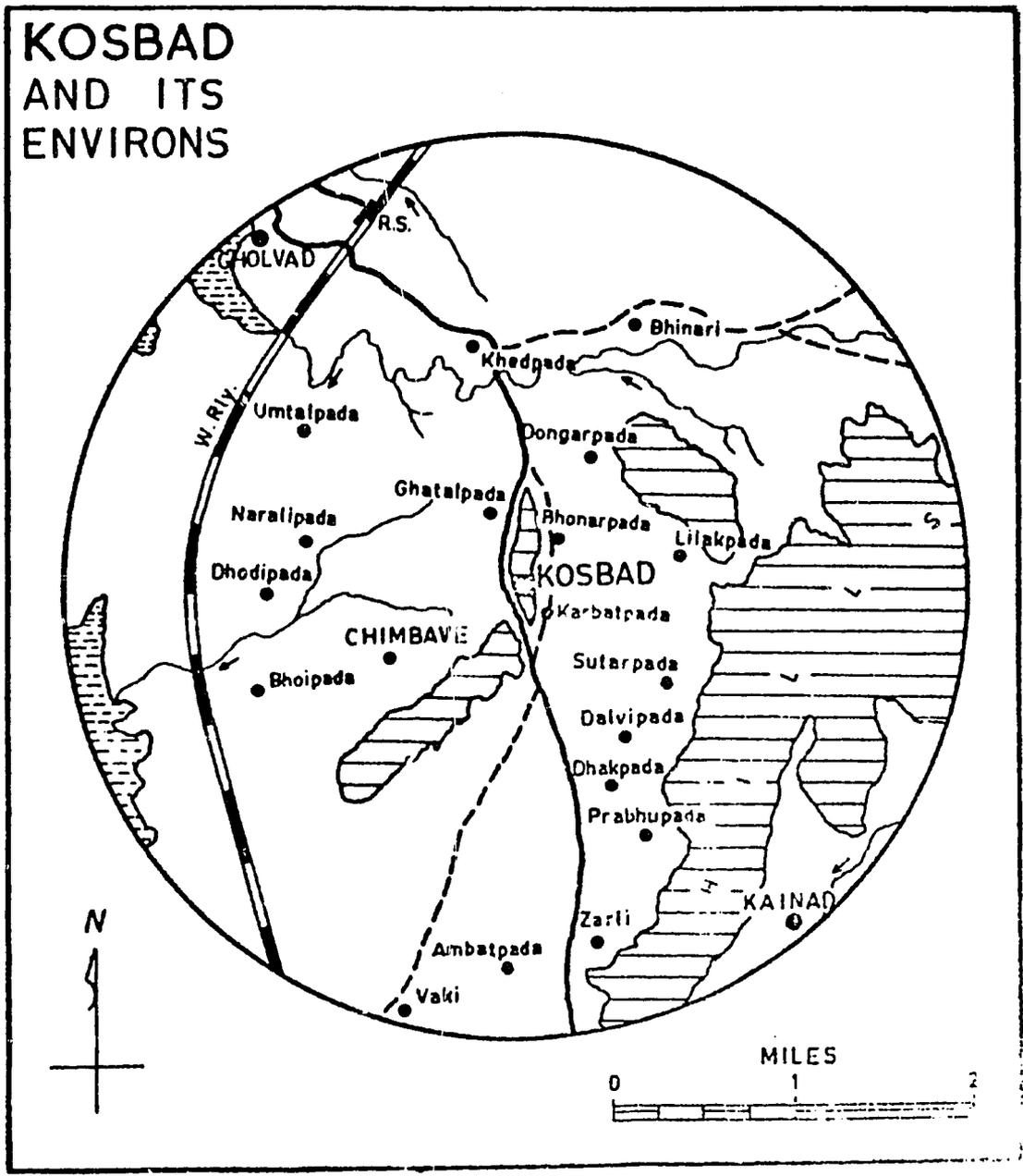
Agriculture has been the main occupation of the community, followed by forest labor. The majority of the Warli agriculturists have been small cultivators, cultivating on an average one hectare per family. Many Warlis also work as agricultural laborers on other people's land. Small cultivators work as agricultural laborers to supplement their income, while landless laborers have to depend entirely upon agricultural and other labor for livelihood. Some work in forest "coupes" under forest contractors, and others work in labor cooperatives. Trees are felled for a variety of purposes, some for charcoal, and carried to the place where the charcoal kiln is situated. They also manage the kiln and look after the loading of charcoal into trucks.

In the past some of the Warli laborers were "bonded"; that is, they had to work in the house and/or on the farm of their master from whom they had taken loans. Most of the loans were marriage loans, and these laborers were called *lagnagadis* (marriage-debt-laborers). Their hours of work ranged from 10 to 12 per day and even more in the busy season. They were paid a small local measure of paddy, and the wage rate was less than that for casual laborers. It took the Warli families years, sometimes generations, to pay off their "debts" in this manner. This custom is now reported to be on the wane but is not totally extinct.

Warlis are even more backward in their education than the general Adivasi population of the State. In 1971 literacy among Adivasis generally (rural and urban combined) was about 12 percent whereas among the Warlis it was only about 8 percent. About 14 percent males and 2 percent females among the Warli tribe were recorded as literate in the 1971 census, as against 19 percent males and 4 percent females among the total Adivasis in the State. As in education, in other matters also, the Warlis were and are considered to be the most backward of all the Adivasis in the State, with the possible exception of the Madias and Kathodis.

Earlier in this century most of the land in the tracts of which we speak belonged to the Warlis. After the opening up of these areas to outside influences and particularly during famine years the Warlis began to lose their lands to moneylenders and others at such absurdly low prices that by the Thirties there was hardly any Adivasi who could be described as a landowner. All the land was gobbled up by outsiders, and the Warlis, like other Adivasis, worked as tenants. A half-share of the produce

MAP 6



was the prevalent rate of rent; in addition, the Warli family had to work on the private estate and in the household of the landlord either for nothing or for very low wages. The Warli family grew only one kharif crop of paddy producing from 7 to 12 quintals per hectare. After paying the rent there was little left to subsist on. According to various estimates and in different areas, from two to four months of the year were spent in a state of semi-starvation. A thin porridge (*ambil*) of rice seasoned with a little salt was the main diet during the lean months, and this had frequently to be supplemented with jungle roots, leaves of trees, and various kinds of rodents. At the beginning of the sowing season paddy was borrowed for consumption, and after the harvest they paid back up to twice the quantity borrowed. The rates of interest, if calculated on this basis, ranged from 100 to 200 percent per year.<sup>1</sup> In grass cutting, tree felling, and charcoal making they received very low wages and lived in subhuman conditions. Conditions of the Warli tenants and workers were generally worse than those of serfs. Physical torture and occasional murder of the Warlis were not unknown, and Warli women were reported to be freely misused.

The Warlis continue to live in huts made of *kuda* (a sort of cane) stalks smeared with a mixture of mud and dung. Roofs are made of large teak leaves strung together. The inside of the hut is completely dark with little ventilation. The few animals they have are also housed in the hut itself during the rainy season. Household articles consist of a few earthen pots, possibly an occasional brass utensil. Children, both boys and girls, generally go about naked except for a nicker-like strip of cloth round their waist. In past times the Warli used to wear a nicker-sized loin cloth and a turban. Now shorts and shirts are a common sight, except among old men and women now wear a knee-length sari and a bodice.

There is a shortage even of drinking water in the dry months, and sometimes it has to be fetched from long distances. Bathing is, therefore, infrequent. Women's and girls' hair, unwashed for days, are full of lice. Malnutrition and unsanitary living give rise to malaria, diarrhea and dysentery on a large scale. Even today in many padas half the children are afflicted with scabies and look terribly undernourished, lackluster, and rickety. As the children grow, they give the appearance of thriving, partly because they can roam about to find some kind of food for themselves, partly because (it is said) they "absorb nutrition from the sunlight." For "medical" care the traditional Warli institution is the *Bhagat*-- a kind of witch-doctor.

Alcohol is a great scourge. D. Symington in his *Report on*

---

<sup>1</sup>In some areas even today they are reported to be around 500 to 600 percent.

the *Aboriginal and Hill Tribes*<sup>1</sup> said that the tribals "drink as a race." This is broadly true of the Warlis: a few drops of liquor are poured into the mouth of the newborn baby; a few drops in the mouth is the last gift to the dead. Thus, literally, from the cradle to the grave drinking haunts the Warlis. The Bhagat cannot function without drink; the marriage priestess (*Dhavleri*) cannot perform her rituals without drink; and the tribal council cannot judge cases in the absence of liberal quantities of drink. In short, liquor is consumed extensively in all rituals on all social occasions, and by virtually all Warlis irrespective of age or sex.

In days past the favorite drink was *toddy*, supposed to be nutritious and less inebriating. Now *toddy-tapping* is legally prohibited except on a license. The Warlis are now increasingly drinking a brew of black *gur* (jaggery or raw sugar) fermented with alum, and numerous illicit stills are said to be operating in Warli houses. This *gur*-alum concoction is considered to be extremely strong and a serious health hazard.

#### The Warli Mind

A few sociopsychological characteristics of the Warli, significant from the point of view of his modernization, are mentioned here as important elements in an understanding of him.

A well-known Warli song runs as follows:

If you are born a Brahmin,  
 You will die writing;  
 If you become a Marwadi,<sup>2</sup>  
 You will die weighing;  
 If you become a Chamar<sup>3</sup>  
 You will die making straps and *jotas*<sup>4</sup>  
 But if you are born a Warli  
 You will be the King of the Jungle.

The proud tone of this song is deceptive; there is hardly anything in an average Warli's life which corroborates, at least on

---

<sup>1</sup>Report on the *Aboriginal and Hill Tribes of the Partially Excluded Areas in the Province of Bombay*, Superintendent, Government Printing and Stationery, Bombay, 1939.

<sup>2</sup>Member of a trading-cum-money-lending caste.

<sup>3</sup>Leatherworker

<sup>4</sup>A *jota* is a leather collar around the neck of a yoked bullock.

a conscious level, the essence of the song. His spiritual world is governed by evil spirits and unkind gods, and his secular world is governed by exploiters in the persons of landlords, moneylenders, traders, police, and civil officers of the government. The Warli has been a slave to all these. No "King of the Jungle," he is a "King of shreds and patches."

Fear is his common characteristic. He seems to be perpetually haunted by it. An anecdote about a tribal community tells of a tribal youth, trying to run away from a government officer on his visit, who, when caught and brought back to the officer, was actually discovered to be a tiger-killer. The "government" is, for the Warli, the quintessence of exploitation, and the Nargolkars<sup>1</sup> have reproduced a lullaby sung by the Warli women at the time of the naming ceremony which asks the child not to be afraid, among other things, of "Sarkar-Darbar"; i.e., government and its paraphernalia. In the face of atrocities exacted upon him, the Warli has hardly ever raised his hand or shown any other sign of resistance. Elsewhere, as the history books tell us, an occasional murder of a moneylender might act as a check on usury; but no instances of this kind were ever reported from the Warli or other tribal areas. In fact, as Symington has reported, the crime rates in tribal areas are among the lowest. These people seem to be the almost perfect examples of what Verrier Elwin has described as "loss of nerve" affecting almost all tribals.

The Nargolkars say that the Warli has no inspiring history. One Warli story tells of a great Warli king of old to whom a Brahmin once came asking for sacred alms. On being asked what his pleasure was, the Brahmin replied, "Land admeasuring a bullock's hide." The king agreed and the Brahmin's "bullock's hide" went on expanding such that it finally enveloped all his kingdom. It is significant, if tragic, that being cheated out of the land is actually the theme of an old folk-tale; indeed, his more recent history is full of such incidents. More significant from the present point of view is the fact that such history can hardly inspire anybody. K. J. Save, author of *The Warlis*, gives a more telling example of the Warli's unflattering self-image by quoting a Warli saying about the origin of the name Warli. "The God created us last and thus finished the rotten business (*pida Warali* in Marathi); therefore we are Warlis."<sup>2</sup>

Probably indicative of this low self-image and also of an absence of a sense of individuality are some of the Warli names: Thinny (*Patlya*) for one who is born thin; Smally (*Barkya*) for one who is born small; Manglya or Mangli for a baby born on a

---

<sup>1</sup>Kusum Nargolkar and Vasant Nargolkar, *Jangalche Raj* (Marathi), Shri Mouni Vidyapeeth, Gargoti, 1955, p. 102.

<sup>2</sup>K. J. Save, *The Warlis*, Padma Publications, Bombay, 1945, pp. 168-69.

Tuesday (*Mangalwar*); Chaitya or Chaiti for one born in the Chaitra month; and so on. These are almost common nouns rather than proper nouns, and the lists of names given by the Nargolkars hardly exceed a page. The widely prevalent custom among all sections of the Hindu society of naming children after gods and goddesses is conspicuous by its absence among the Warlis.

Along with most tribal communities the Warlis, too, are described as "lazy." This laziness is probably a result of varied factors, not the least of which is the Warli's low level of nutrition and its inevitable concomitant, a general listlessness. Torpor induced by liquor would be another factor. Indolence may have been culturally determined in part through a lack of faith in human effort in a world ruled by animistic deities and aerial spirits. According to some observers, racial memories of a hunting life of old still haunt the Warlis and prevent them from concentrating on work in a confined area. There is some evidence for this conjecture. A Warli boy may even today spend hours chasing a flying bird and trying to kill it with a stone. The Nargolkars refer to the apparently strange habit of Warli children being excited over a mouse, chasing it and killing it, shouting war-like cries. (There is hardly any other game left for them to hunt!)

Associated with the above is the Warli habit of living from one moment to the next. It is said that he hardly ever thinks of the morrow, and his pleasures all consist of the immediate rather than the remote. This is epitomized in a Warli adage, "Catch fish and drink; the rains are yet far away."<sup>1</sup> When among themselves, therefore, the Warlis are generally supposed to be of a happy and cheerful disposition. On almost empty stomachs they can dance the livelong night to the tune of the *tarpa* (a wind instrument).

The fact that the *padas* of the Warlis (and other hill tribes) are somewhat scattered may have been an obstacle to organized social life. We suspect that the Warlis have few of the associations ordinarily conjured up in the ordinary Indian villager's mind at the mention of his village, although this topic is a matter for further investigation. Another interesting aspect of Warli life that invites investigation is inter-*pada* relations, for there is some evidence to suggest that these are less than cordial if not downright hostile. The reminiscences of Tarabai Modak, the earliest of those associated with GBSK in Kosbad, record strange occurrences like that of the children of one *pada* disappearing from a *Balwadi* (nursery or kindergarten) when children from another joined it.

Even within the village, in fact even within the family, observers have suggested a lack of familial warmth. The Warli family is nuclear in the sense that as soon as the son marries he

---

<sup>1</sup>*Ibid.*, p. 232.

sets up a separate kitchen, if not a separate household. Parents, however old and helpless, it is said, are not properly looked after. Here again, pervasive poverty may be at least part of the explanation, but Banfield's "amoral familism," may be more appropriately descriptive.<sup>1</sup>

An integrating mechanism in any society is a developed language which makes conversation possible. It has been said, unverifiably, that the traditional Warli dialect used to consist of only 300 words. Lack of social life among Warlis, except on occasions of ritual, may owe itself to this deficiency. (The Warli dialect has no script.)

Beyond this, the linguistic handicap may indeed have had an inhibiting effect on the Warli power of thinking. This, combined with the absence of any general intellectual discipline which the inability to count is apt to produce, may have given rise to a native simplicity and innocence that characterizes Warli thinking as it finds expression in their cosmology, their folk tales and songs, their total Weltanschauung. Harischandra Patil, the first head of AI at Kosbad, has told us one of the ways in which the Savkar (landlord-cum-moneylender) used to cheat the Warlis. When a hen laid an egg, the Savkar would offer to buy it for the few *paise* that was its price then, but not take delivery immediately; he would take the full-grown cock or hen a few weeks later saying that the price had already been paid. This, on the one hand, no doubt shows the cunning of the Savkars; on the other, and more important for our purposes, it is a revealing comment on the Warli's innocence bordering on gullibility.

#### EARLY EFFORTS TO IMPROVE THE CONDITIONS OF TRIBAL PEOPLE

##### *The Influence of Voluntary Agencies*

New influences began to act on the traditional pattern of Warli life from the first decade of the present century. The beginning of ameliorative efforts was made by Christian missionaries. An American Protestant mission, "Church of the Brethren Mission," began running a dispensary in Malyan, near Dahanu, in 1903, and its medical activities gradually expanded. The Mission started schooling activities in 1923, beginning with a rural boarding school for boys with an agricultural and crafts bias. A Catholic mission, "Society of Jesus," started its educational activities in the Umbargaon tahsil (now in Gujarat State) in 1926. The missionaries were thus the pioneers of Adivasi uplift.

The attention of Indians was attracted to tribal areas only in the early Twenties. The Servants of India Society, founded by the liberal leader, G. K. Gokhale, started its tribal uplift work in

---

<sup>1</sup>Edward C. Banfield, *The Moral Basis of a Backward Society*, Free Press, Glencoe, Illinois, 1958.

the Panchmahals district of Gujarat under the dedicated leadership of A. V. Thakkar (or Thakkar Bappa as he was called), and in course of time the work grew to cover many tribal areas in various parts of India.

What attracted the attention and shocked the conscience of the thinking people of the then Bombay State was D. Symington's *Report on the Aboriginal and Hill Tribes* published in 1939. This report exposed in full the mechanics of exploitation and chastised government administration in no uncertain terms. It marked the beginning of a new ethos. After the resignation of the first Congress Ministry in Bombay, the former Prime Minister, Shri B. G. Kher, paid personal attention to the problems of Adivasis in the State and with the help of Acharya Bhise and others founded the Adivasi Seva Mandal in 1940. The Mandal's activities in the Thana District included propaganda among the Adivasis regarding their rights, striving for redress of the injustices done to them, running grain banks, starting schools, giving medical facilities, and organizing cooperative societies of forest labor.

Faint beginnings of a larger social consciousness and awareness of need to come together for solving common problems became apparent when a section of Warlis met together in 1934. According to K. J. Save, representatives of about fifty Warli villages from the coastal and central parts of the Dahanu tahsil held a conference at Waki in that year. It appears from Save's account that the main task the conference performed was to lay down rules relating to marriage. Some of these rules reflect the Warli's desire to bring themselves closer to Brahmanic rites (a very good example of what sociologist, M. N. Srinivas, calls "Sanskritization").

The first flicker of Warli resistance to exploitation was seen in 1944, when author K. J. Save then a Special Officer, Tribals, discreetly asked the Warlis to stop work if they did not get the fixed minimum wage, and this led to a strike of about one thousand Warlis in several villages of the Umbargaon tahsil. This strike, however, was short-lived and, by and large, unsuccessful.

The next, and far more important, step was taken by the Kisan Sabha under the leadership of Communist Party Worker Mrs. Godavari Parulekar, in 1945. Mrs. Parulekar, affectionately called "Godarani" (Queen Goda) by the Warlis, assiduously worked in three tahsils, and for the first time the Warlis gave enthusiastic, wholehearted support. The agitation against landlords, money-lenders, and contractors culminated in police firing in Talwade village in the Umbargaon tahsil. Three Warlis were shot dead and several injured on the 11th of October, 1945. On December 9, 1946, two thousand Warlis marched to Nanivali when another police firing took five lives. The "Warli Revolt" made headlines all over the world. Leaders of the revolt were rounded up, Godarani was served with an expulsion notice, and the revolt soon died down.

---

<sup>1</sup>M. N. Srinivas, *Social Change in Modern India*, University of California Press, Berkeley and Los Angeles, 1966.

Summing up her reminiscences of this period Mrs. Parulekar says,

After the many battles that the Adivasis had to fight to solve their economic problems and to get increased wages, their economic condition today is better than it was. But it would be wrong to assume they no longer starve. The difference in their condition has not been so great that they no longer need to eat roots and leaves.<sup>1</sup>

She claims, however, that the Adivasi has gained in self-respect and a new self-assertion. To quote the concluding paragraph of her book:

The main change in the Warli is the awakening of his pride and self-consciousness as a human being. His manner and deportment reflects the self-confidence he has gained out of the knowledge of his strength as a member of organization. He has lost his fear and his inferiority complex. He has become ambitious. He is consumed by a desire to understand world politics.... He has begun to desire a better life and in order to get it, he is willing to put in any amount of effort.... The Adivasi who was afraid and could not put two words together in a coherent manner now stands on the dais and makes political speeches....<sup>2</sup>

Our limited experience suggests that these claims are exaggerated; however, the "Warli Revolt" must be counted a significant event from the point of view of the self-assertion of the Warlis.

#### *Governmental Measures*

The government's ameliorative measures have stressed the regulation of tenancy, moneylending, and wages. A beginning in the direction of regulation of tenancy was made by the Government of Bombay in 1939. From then until 1956, when a new and radical amendment to the Bombay Tenancy and Agricultural Lands Act was passed, the provisions of various laws and amendments included, among other things, security of tenure, scaling down rents and voluntary repurchase of land by the tenants. The 1956 "Land to the Tiller" amendment sought to confer land ownership rights on the tenants at a nominal price. Since the objective of the new amendment was to abolish the tenancy system (with a few exceptions) and to substitute owner-cultivation in its place, those who benefited from the law benefited substantially in the sense that they acquired (restricted) property rights in the

---

<sup>1</sup>Godavari Parulekar, *Adivasis Revolt*, National Book Agency Private Ltd., Calcutta, 1975, p. 182.

<sup>2</sup>*Ibid.*, p. 188.

land; those who for any reason (legal or otherwise) failed to acquire ownership rights suffered substantially because they lost even the tenancy rights.

In order to improve the conditions of Adivasis working for forest contractors and plantation owners, minimum wages were laid down in the Forties; from 1954 the Minimum Wages Act was also extended to this area.

Since 1947 the government has been encouraging formation of Cooperative Labor Contract Societies for forest workers. Many societies, under strict governmental supervision, were reported to be running well.

Prohibition of alcoholic beverages was imposed on the (then) Bombay State in 1950 to good effect for a year or so. But gradually implementation became lax and illicit distillation was generally on the increase.

The educational efforts of the Government of Bombay generally followed the recommendations made by the Wandrekar Committee appointed in 1947. The government's policy until then had been to establish a primary school in every village having more than 1000 population; this was obviously unsuited to the needs of the Adivasis who lived in very small hamlets. The limit of 1000 was, therefore, brought down to 500. A few boarding schools were also established. After a time the concept arose of the "Ashram Shala" in which a residential school was accompanied by a farm and/or craft training facilities.

In the early Fifties the "Sarvodaya" scheme was applied to the Thana District. Under this scheme about 20 to 30 Adivasi villages in each district were selected for special programs like agricultural improvement, village industry, education, health, water supply, and cultural uplift, and a sum of Rs. 4 lakhs for a period of four years for each such unit was set apart for this purpose. The Sarvodaya centers were to be run, not by government administration, but by tested and experienced social workers mostly belonging to the Sarvodaya movement which was started by Vinoba Bhave, the famous *Bhoodan* (land-gift movement) leader.

A few other measures such as grain banks, distribution of forest lands ("plots") for cultivation, and some facilities for using forest produce for home use have also been in existence.

#### *Results of Voluntary and Governmental Efforts*

The effect of voluntary and government efforts on the Adivasis, especially the Warlis, have in general been extremely limited.

The efforts of the Christian missionaries were largely directed to educational and health needs; they did not try to grapple with the underlying economic problems, nor did they strike root among local people because of their proselytizing activities. Efforts of voluntary constructive agencies like the Adivasi Seva Mandal did result in some useful contributions, like legal help, occasional redress of grievances, and the setting up of cooperative societies. But the Mandal's work lacked teeth for two reasons. It avoided confrontation and militancy where it was needed; many of the office bearers themselves came from the exploiting classes, and they constituted the main support of the ruling Congress Party in this area. Mrs. Godavari Parulekar's work was significant in that it aroused the Warli from his age-old torpor and taught him self-respect. But it was purely agitative; its "educational" content was exclusively political. In fact, reports suggest that the Communists ridiculed constructive effort of any kind, including that of curbing drink addiction. Another feature of the Communist movement, according to knowledgeable people in the area, was terror, practiced on the Adivasis.

However, to the credit of the Warli uprising the worst forms of exploitation and atrocities diminished, if they did not disappear altogether. Wages improved. The uprising also proved that the somnolent Warli was capable of being roused and fighting back. At least some Warlis reached a high level of political consciousness and to the extent that self-assertion and belief in human effort (e.g., that the Savkar can be humiliated by organized strength) are also the mainspring of economic development, even political agitation must be given its due importance in the economic context. That the impulse of self-reliance was not directed into economic channels is, of course, another story. It must be remembered, however, that the Communists became one with the Warlis, suffered with them and for them, and were thus able to secure their confidence in much greater degree than other voluntary organizations and political parties.

Moneylending legislation by government has nowhere been a real success and therefore its failure must have been far worse in the Adivasi areas. The "Land to the Tiller" Amendment to the Bombay (now Maharashtra) Tenancy Act was important. It appears that the tenancy system which was the characteristic tenure in these areas has now given way to owner cultivation although, even today, the proportion of tenancy is higher in Adivasi than non-Adivasi areas. But some qualifications are necessary: the lands that the landlords parted with are reported to be inferior, the superior ones being retained for "self-cultivation." There is concealed tenancy in many areas in the wake of the tenancy legislation and the situation is not different here. Possession of land has not led to much improvement in economic conditions because of the moneylenders' hold. Educational efforts have met with little success. It is common in many villages for either the schoolteacher or the children not to turn up. The content and methods of education have been too orthodox and formal without sufficient relevance to the conditions of Adivasi life. As for

the prohibition of alcoholic beverages and other measures of Adivasi uplift, the general laxity and corruption in government administration has been proverbial.

There have been special programs like the Tribal Development Blocks. Ashram Shalas (residential primary schools with agricultural and craft bias) have increased in number. Now there is a special Adivasi subplan with much larger allocations, but its results have yet to be seen, and many policies are still in a state of flux.

In any case, government efforts have not kept pace with the growing population. Since independence, poverty in both absolute and relative terms is generally considered to have increased in India. The Adivasi areas are no exception. In fact, what is true of the larger rural population is likely to be even more true of the Adivasis. J. S. (Jayant) Patil, head of AI since 1968, tells us that he sees more disease and poverty today than thirty years ago.

One difference between the other Warli tracts and the area around the Kosbad Institutes must, however, be noted. There are many chikoo and banana plantations in the surrounding area that give year-round employment, and wages today are said to be Rs. 5 or 6 per day for adult workers. During the five years it takes for the chikoo trees to become ripe enough to yield their fruit, lily and rose flowers are planted between the rows, and this activity provides employment for children. (The flowers are plucked in the early morning around 1:00 a.m., and after the evening meals the children usually sleep on the plantation and are awakened in time for the plucking.) Rigors of usury are reported to be less intense than in other Warli tracts.

It is against this general background of the Warli life and mind that the educational and other efforts of the Kosbad Institutes must be seen and evaluated.

## EVOLUTION OF THE INSTITUTES

This chapter provides a brief description of the evolution of the AI and GBSK from their early beginnings, with emphasis on the strong moral strain that has characterized them and still, to an extent, sustains them.

### THE AGRICULTURAL INSTITUTE (AI)

The parent body of the AI is the Gokhale Education Society (GES), established in 1917, in memory of Gopal Krishna Gokhale (1866-1915), a leader of the "Moderate" (Liberal) wing in the national independence struggle, an influential statesman and a man of enlightened ideas on social and educational reform. Mahatma Gandhi considered Gokhale his political "Guru." To understand the social reformist aspirations of GES, it is necessary to note that Gopal Krishna Gokhale had himself founded the Servants of India Society in 1905, an organization dedicated to such ideals as the spread of education, service to the depressed classes, famine relief, and Hindu-Muslim unity. Gokhale was a man of wide influence and prestige, having been a worker of the Sarvajanik Sabha in Poona, Local Secretary of the Indian National Congress held in Poona in 1895, a member of the Bombay Legislative Council (1899-1902), and a member of the Viceroy's Council for twelve years. The GES was in fact only one of several institutions that were established in the country in the name of Gopal Krishna Gokhale.

One of his admirers was T. A. Kulkarni, a high school teacher in Bombay, whose great compassion for the poor and the unfortunate was a leading attribute of his life; even as a young man he had spent a great deal of time working for industrial workers in the labor areas of Bombay or comforting the inmates of jails. His concern for the disadvantaged was accompanied by a strong interest in agriculture and crafts. He had carried out experiments on fiber development and cattle feed.

The GES is probably the only institution in Maharashtra founded and nurtured by the urban elite that catered at least in part to the educational needs of the rural, backward, and poverty-stricken areas. The history of the GES over the years indicates

that it has given equal attention to both urban and rural areas. If the first expression of its solicitude for the poor was a high school in the industrial workers' locality in Bombay, the second was the establishment in 1920 of what became the Soonabai Pestonji Hakimji (SPH) High School in Bordi in the Thana District. Through the combined efforts of T. A. Kulkarni, S. R. Bhise and others, the Gokhale Education Society was formed. Its constitution, drafted by the founder of the Trade Union Movement, Shri N. M. Joshi, was based on the principle of life membership (*i.e.*, members serving for life and dedicating themselves to the cause of education) --a practice that had already been established among educational workers in Maharashtra. As noted above, the GES started its educational work in 1918 by taking over a proprietary high school in Bombay later named Dharamsi Govinaji Thackersey High School. A sign of Kulkarni's interest in crafts was that this high school was the first institution in India to manufacture spinning wheels for Mahatma Gandhi.

Another, probably deeper and more pervasive influence on the further growth and development of GES in the Thana District was that of S. R. Bhise, or Acharya Bhise, as he was called. As a young man he came into contact with Kulkarni; and in joining him in founding the GES, he was asked by Kulkarni to serve in Bordi. From 1920 until his death in 1969 he spent his life in the service of GES and of the down-trodden generally. His formal work as an English teacher and headmaster of the SPH High School in Bordi formed only a part of his total activity, which covered all the downtrodden classes in the Thana District. A great Gandhian, Bhise and his colleagues, including K. M. Chitre, inspired generations of students to take up social work, especially among the Adivasis. The Adivasi Seva Mandal, founded in 1940, the Forest Labor Cooperative Societies, experiments in "basic education," and many other similar movements were launched and nurtured by him. All in all, a model of self-abnegation, Bhise stood as a towering figure over the area for about fifty years.

In 1939 the first popular Ministry of the Congress Party was formed in the Bombay State. Rural development had priority in its program. In this new atmosphere Bhise started a Rural Development Training Center at Bordi, which gave a certificate course of one year in Rural Development. The Government of Bombay subscribed to this idea and extended support to the new venture. As the GES claims, the Rural Development idea in one of its most important aspects (*i.e.*, the creation of a multipurpose village-level worker) actually originated at the Bordi Center. The program, however, was short-lived. It came to a halt in 1942 when the whole nation became engulfed in the "Quit India" movement.

The threads were picked up after independence in 1947 when the time was more propitious for undertaking programs on a larger scale. To a sense of urgency in the air, there was added an accumulated fund of ideas and experiences that people wanted to put into practice. T. A. Kulkarni, who at this time headed the HPT College at Nasik (started in 1924), took the initiative in

establishing an agricultural institute. By this time, the Government of Maharashtra had decided to establish one agricultural school in each district. Taking into account the drive and experience of the team working at Bordi, the government decided to recognize the Rural Development Training Center as its official agency in the Thana District. Thus came into existence the Agricultural Institute at Bordi in 1947. It may be noted that this is the only instance in which a private agency was recognized by the government to work on its behalf. The Institute was soon shifted to Kosbad and started functioning there from the beginning of 1949.

The first head of the AI at Kosbad was Harishchandra Gopal Patil, who was S. R. Bhise's student at the SPH High School in Bordi and whom Bhise had persuaded to study agriculture in spite of Patil's wish to become a lawyer. As a young boy, H. G. Patil was introduced to the study of Adivasi life by Bhise. From 1931 to 1949 he taught agriculture to SPH High School students and then shifted to head the AI at Kosbad. AI's research, training, and development activities in the first twenty years was due mainly to the efforts of H. G. Patil. His memorable contribution to Indian agriculture was propagation of the Japanese method of paddy cultivation which he had studied in Japan as a member of an Indian agricultural delegation in 1951. Kosbad was the testing ground for the new experiments, and Patil toured almost the whole of India broadcasting the Japanese method.

In 1968, Jayant Shamrao Patil succeeded H. G. Patil as head of AI and continues as its leader today. Jayant Patil, also a student of Bhise and Chitre at SPH High School, was the son of Shamrao Patil, a freedom fighter and former Minister of Rural Development in the Bombay Congress Ministry. Like H. G. Patil, Jayant Patil was prevailed upon to study agriculture in spite of his own desire to study law.

Jayant Patil took his Bachelor of Science degree in agriculture and joined the AI in 1949. Standing first in pursuit of his M.Sc. degree, he later, as a Fulbright scholar, studied Agricultural Extension and Horticulture at Kansas State University in the United States in 1962. He carried out research on grasses at the Brisbane University in Australia in 1971, and took up this same type of research in England in 1976. In spite of many lucrative and prestigious job offers, Jayant Patil continues in his present position which he has held for the last 29 years, because he feels his work lies in Kosbad. AI now has a 265-acre well-equipped farm, and its many thriving activities are largely due to Jayant Patil's drive and restless energy.

### *Management and Finances*

AI is not an independent institution, but a branch of the Gokhale Education Society (GES), a registered society and public trust, with its head office in Bombay. The Society runs several schools and colleges at different places in Maharashtra. AI is the

only institution of GES, however, which carries on research and training in agriculture. Two schools at Bordi and Talasari in the adjacent area impart school training with an agricultural bias.

GES has a board of trustees that looks after the property and the general management of AI. The schools and colleges are managed by life members (employees who have been selected to serve for life, i.e., minimum 25 years). There is also a body called the "Senate" representing teachers and other employees in the institutions run by the GES; real power is, however, in the hands of the life members.

Jayant Patil, Principal of the AI and Director of the Krishi Vigyan Kendra (Agricultural Science Center), is the only GES life member in Kosbad. He is also the treasurer.

Although the overall authority rests formally with the board of life members, the AI, especially its Head, can exercise a considerable amount of initiative.

The AI, in its manifold activities (to be described later) employs in all 84 persons in different categories. Not all activities are directed to Adivasi development, but it is a peculiar feature of the AI that most staff are involved, as and when the need arises, in activities addressed to the development problems of surrounding areas. In addition, the trainees and students are made to participate in these activities. Thus, the total manpower input going into developmental activities, although not precisely measureable, is quite large.

The AI has total assets of about Rs. 2.5 million. Its budget for the year 1977-78 showed total receipts of Rs. 1,964,950, payments of Rs. 2,092,500 and a deficit of Rs. 127,550. Of the total receipts of Rs. 2,092,500 the component of government grants was 1,460,300 or roughly 60 percent.

#### GRAM BAL SHIKSHA KENDRA (GBSK)

Strong moral undercurrents are visible in the founding and growth of GBSK. Its history begins with Mrs. Tarabai Modak (nee Kelkar), born in 1892 in a Prarthana Samajist family in Bombay. Prarthana Samaj was a late nineteenth century socio-religio-reformist movement started by such early graduates of Bombay University as Justice M. G. Ranade, the Orientalist R. G. Bhandarkar, Vaman Abaji Modak, and others. Tarabai's father, Sadashiv Pandurang Kelkar, was the first full-time "missionary" of the Samaj. He married a widow in days when widow remarriage was considered taboo and actively opposed. The widow whom he married belonged to another Brahmin subcaste, and this type of alliance was also a departure from custom. Sadashiv Pandurang Kelkar edited the Prarthana Samaj organ, "Subodh Patrika," for many years and ran a weekly for industrial workers. Uma,

Tarabai's mother, was also far ahead of the contemporary Indian womanhood in general enlightenment and social awareness. Young Tarabai was thus brought up in a uniquely progressive household.

She married into another Prarthana Samajist family, the Modaks, and her husband, K. V. Modak, was a prosperous lawyer in Amraoti. However, the union proved unhappy, and Tarabai left Amraoti in 1923 for Dakshinamoorti near Bhavnagar in Gujarat. Here, under the leadership of Girijashankar (Gijubhai) Badheka, she spent nine years in building up a child education movement that took the form of Nutan Bal Shikshan Sangh (NBSS), founded in 1926. Tarabai and Gijubhai modeled their preschool programs on a combination of Froebel and Montessori, but thoroughly "Indianized" them.

Tarabai came to Bombay in 1936 and started the first preschool center, "Shishu-Vihar," in a middle-class locality. The urge to suit preschool education to the needs and circumstances of the vast masses of poverty-ridden people of India, always dormant within her mind, first found expression in a scavengers' colony in Bombay and finally in the establishment of GBSK as a branch of the NBSS in Bordi in 1945. If Gijubhai can be credited with the "Indianization" of preschool education, Tarabai can be credited with its "ruralization."

Because Tarabai divided her time between Shishu Vihar and GBSK for the first few years, the main burden of work at Bordi fell on Anutai Wagh. Anutai Wagh had become a widow at the age of 13; she had completed only three years of primary education before her marriage. Later on she completed her primary education at various places and joined the Training College at Pune. After completing the training courses, she joined a primary school at Chandwad in Nasik District as an assistant teacher. She left her job in 1933 and joined the primary section at Hujurpaga Girls' High School in Pune as a teacher. She entered night school and passed her matriculation while working as a primary teacher. Later she acquired a B.A. at Bombay University.

The Kasturba Memorial Trust organized some camps to train women volunteers to run educational centers for children and women. One such camp was organized at Boriwali, a suburb of Bombay, in 1945, where Tarabai was one of the lecturers. Tarabai asked the participants if any of them were ready to work in tribal areas and run a preschool center there. Anutai, tired of a routine teaching job and wanting to do social work in a wider field, volunteered, and this heroic step was the beginning of a remarkable partnership that lasted until Tarabai's death in August 1973.

GBSK's work at Bordi from 1945 to 1957 could be considered pioneering in many ways. During these years it transformed both the content as well as the methods of established preschool and primary education. These will be described later.

While at Bordi, Tarabai and Anutai began to spread their net wider in order to encompass the really disadvantaged classes of society--for Bordi, after all, was a middle-sized township and not representative of the rural areas. About 5 km. from Bordi lived a small group of the Dubla Adivasi tribe, for whose children a Balwadi was started in the year 1952. Here new problems were encountered and new solutions sought. The critical "Vikaswadi" concept (to be discussed later) developed out of the experiences with Dubla children.

However, the inner cravings of Tarabai and Anutai to work in the heartland of poverty and backwardness could not be satisfied by a mere appendage of Adivasi child education. Tarabai, therefore, wound up affairs at Bordi and in 1956 at the age of sixty-four moved to Kosbad "to play the last difficult gambit of my life."

Today on the Kosbad Hill, adjacent to the AI on the north, stand several one-story buildings of GBSK housing a number of its institutions and activities.

### *Management and Finances*

GBSK is not an independent body, but a branch of a national body called Nutan Bal Shikshan Sangha (NBSS), founded by Girijashankar Gijubhai Badheka and Tarabai Modak in 1926. NBSS is a registered body under the Indian laws with its head office in Bombay and several branches all over India. Its main branches where preschool training is given are mainly in Bombay, Kosbad, Bhavnagar and Pune. Shri Morarji Desai, until recently the Prime Minister of India, is the President of NBSS. Anutai Wagh, Head of the GBSK in Kosbad, is its Secretary.

The work at Kosbad is looked after by the GBSK Committee consisting of 21 members, some of whom are actually working at Kosbad. Anutai Wagh is the Secretary of this Committee and Jayant Patil of the AI is one of its members. The paid staff of the GBSK Committee consists of one office secretary and one watchman. Anutai Wagh is the Honorary Director and also the Principal of Bal Sevika Vidyalaya from which she gets her salary.

The GBSK, in its different activities, employs a total of 93 persons. Of these 21 are attached to the primary school and 20 to the Balwadis. The total physical assets of GBSK are valued at about Rs. 520,000. The potential income earning assets are a farm land of about six hectares, a printing press, and buildings rented to staff (which bring in rent in the amount of about Rs. 20,000).

The total receipts in 1976-77 from all activities amounted to Rs. 474,735; expenditures totaled Rs. 577,801, having a deficit of Rs. 103,066--fairly heavy considering the size of the total budget.

### *Cooperation Between AI and GBSK*

The close and cordial relationship between AI and GBSK dates from the latter's inception at Bordi in 1945. In fact GBSK was set up in Bordi because AI's parent body GES had already started its activities there. Similarly GBSK moved to Kosbad partly because AI was already there.

A number of boys and girls who complete their primary education in the GBSK primary school join the AI's secondary school; some of those who pass out from the secondary school join GBSK's Junior College of Education. Some of those trained there man AI's schools. Thus educationally the efforts of the two are complementary.

Physical proximity of the two Institutes on Kosbad Hill naturally leads to constant interaction. GBSK's farm, for example, gets guidance from AI.

## CHAPTER 3

### THE AGRICULTURAL INSTITUTE'S PROGRAMS

This chapter describes the activities in which the AI has engaged--and is currently engaging--itself. The AI, started basically as an agricultural training institute, continues to perform this function today. Actually it was never meant, at least formally, to be a development agency for the Adivasis. Nevertheless, a number of factors have given it over the years a strong orientation towards Adivasi development. One is the ideals of the founders to be of service to the downtrodden. The second is the locale, which happens to be in the heartland of the Adivasi area, and the two are not unrelated. Third, although as a training institute the jurisdiction of AI is the whole Thana District, the agricultural problems of the district as a whole are generally similar to the problems of Adivasi agriculture. Finally, it must not be forgotten that the Adivasis constitute about 25 percent of the population of the district.

A brief description of AI's several activities follows. Not all these activities have equal importance in relation to the development needs of the surrounding area, yet each is highly relevant for the reasons mentioned above.

#### EXPERIMENTAL EFFORTS TO IMPROVE CROPS

##### *Japanese Method of Paddy Cultivation*

Inasmuch as rice was the main crop grown in the area, it followed that research should begin with rice. The traditional method of burning the plot used for preparing seedlings involved time and energy and resulted in doubtful gains. In 1951, the Bombay Government sent H. G. Patil, principal of the AI, and two others to Japan to study rice cultivation techniques. The "Japanese Method," subsequently tried at Kosbad, consisted of preparing raised seed beds as against flat ones, admixing salt water and medicines to seeds before use, using farmyard and compost manure, thin sowing, transplanting in rows, and interculturing with hand hoes. Nothing new was required in the way of equipment--just a new kind of discipline. The new method was profitable (the seed rate was reduced from 20 kgs. to 5 kgs. per acre) and accounted

for a 30-35 percent rise in productivity. Although individual elements of the Japanese Method, except for the raised seed bed, were known to Indian farmers, the combination of them created a new technique that later became popular in most rice-growing regions of India. Patil, assisted by the Gandhi Smarak Nidhi (Gandi Memorial Fund), toured the whole of India to propagate the new message.

In trying the new method on its own farm and inviting farmers of the region to observe it (selected private farms also experimented and demonstrated its advantages), the Institute made it clear that preparation of the raised seed bed was the crucial element. The raised seed bed was manifestly more beneficial, in that it facilitated the drainage of water and consequently provided ample scope for root growth. But convincing the farmers, especially the Adivasi, of this truth became an overriding concern.

#### *HYVs and Green Manure*

The AI was again the pioneer in the introduction of high yielding varieties of rice (HYV) in the coastal areas of Maharashtra. In 1967 it planted IR-8 (initially developed at the International Rice Research Institute in the Philippines) on one acre and took a harvest of 25 quintals. The HYVs called for heavy doses of fertilizers and manures. To fill up the deficiency of organic manure the AI brought the seeds of a fast-growing leguminous shrub *Glyricidia Maculata* from Tamil Nadu and established a plantation on two acres in 1968. In course of time the enterprise became so successful that the AI now supplies seeds to the whole of Maharashtra.

#### *Community Nursery*

Because July is the most important month for the full growth of the rice plant, individual farmers, faced with the uncertainties of rains, were unable to take advantage of its usual rainfall unless the transplantation operation were completed earlier, and this required irrigation which the farmers lacked. Therefore, AI overcame the difficulty by preparing the seedlings on its own ten-acre farm under irrigation and thus assured a good quality of paddy crop. It was one of its important findings that transplanting by the end of June resulted in approximately 35 percent increase in production, especially advantageous to Adivasi farmers, some of the poorest of whom were wont to consume the seed, but not the seedlings, that AI supplied on a no-profit/no-loss basis.

The major constraint on this activity was the prohibitive distances: seedlings cannot be carried more than 5 km. from the nursery, because of both an absence of roads and means of transport. The remedy has been to establish nurseries at different places or to set up seedling banks. After 1972, the AI opened two more branches at Talasari and Waki.

### *Adaptation of New Varieties*

The next stage was the breeding of seeds more suitable to the climate and other ecological conditions of the region. The situation in the Kosbad region demanded a variety that would mature in the shortest possible period, for two reasons. First, because of low water retention the hilly slopes and uplands are fit only for early maturing varieties; second, and more important, because the tribals and other poor farmers, desperate for food, tend to harvest and consume the longer maturing crops before they are fully mature.

After preliminary experiments, the AI found that the "Blue Belle" variety (obtained from the Beaumont Research Center in Texas) was quite suitable to the region. It matured in about 100 days as against Taichung and IR-8 which takes 120-140 days; moreover, it could be directly sown without transplanting the seedlings, thus saving expense. Experiments were also conducted on a locally developed variety known as "Kosbhat" ("kos" is short for Kosbad and "bhat" means paddy) that matures within 120 days and gives 10-15 percent more yield than Taichung. The research is still going on, the ultimate objective being to evolve a variety that will mature within 60 to 70 days and give a large yield.

### *Anti-Lodging Device*

Lodging<sup>1</sup> of the paddy crop was another problem that drew the attention of the research workers of the AI. This problem was particularly acute in the low-lying areas, receiving large quantities of surface soil, leaves, and animal washings in the running water and consequently becoming overfertilized. The soil thus affected encourages the growth of foliage rather than of grain, as a result, the crop tends to fall on the ground. The traditional way of preventing this, known as *posha*, consisted of replantation and cutting of foliage. But it has its shortcomings in that it diminished yield considerably. After a period of five years Jayant Patil determined that spraying a mild dose of "Two-1 Four-8" on the standing crop, thirty days after transplantation, discourages the growth of foliage, and the crop becomes strong enough to stand till the harvest.

### *Fodder and Grassland Development*

The Thana District has about five lakh acres of grassland which, because of the considerable rainfall and humidity, are good for pasture development. During the past fifteen years, the

---

<sup>1</sup>Falling; wind laying the crop flat on the ground.

Institute has done considerable research work to find suitable grasses. Five kinds that have been successfully identified (1966-1976) and introduced so far are: (1) *Sesbania Grandiflora* (Agasti), a leguminous perennial with 17 percent protein; (2) *Lauconia Gloca* (Goparna or Kubabhul), from tropical America, also a perennial with 27.4 percent protein; (3) *Desmanthus Vigratus* (Dasharath Ghas), with 17 percent protein; (4) *Styloseanthes Humilis*, or "Townsville Stylo" (Shravan Ghas), an Australian legume with 17 percent protein; and (5) *Brachiria Decumbus* (Bharat Ghas), also Australian, with 8 percent protein.

### *Multiple Cropping*

Breaking the monocrop pattern and introducing other crops was another important goal of the research program. Farmers had never thought it possible to grow crops other than paddy. The first task before the Institute was to demonstrate to the farmers that it was possible to grow other crops on their lands.

Wheat, together with green gram, was chosen for experimentation. Many varieties of wheat were brought from different parts of the country as well as from outside India. Mexican wheat was found most suitable, but experiments revealed that important adjustments were necessary to suit the soil and climate conditions of the area. It was found, for example, that the second or third week of November was the most suitable period for sowing; that it was necessary to increase the plant population per acre, since the climate in the region was not as cold as in other wheat growing areas; that this in turn necessitated increasing the seed rate to 60-80 kgs. per acre; that since the soil was sticky, it was necessary to reduce the water quota, and so on. In addition to these technical adjustments, there were other peculiar problems that required solutions of a different kind. For example, it was found that, because all the birds flocked on the wheat growing farms, a special program for crop protection against birds was essential. In spite of all the limitations, the Institute succeeded in demonstrating that 8 to 10 quintals of wheat per acre could be produced.

The third experimental crop was that of summer green gram (*Vaishakhi Moong*), which may be substituted for or grown in combination with chillis or various kinds of vegetables. The Institute has developed two varieties of chilli that mature early and yield 30 percent more. Net income from the chilli crop is said to be Rs. 5000 per acre.

Thus the AI claims to have offered a three-crop cycle to coastal and Adivasi farmers. On a three-acre farm that is well supplied with water, at 1976 prices and costs, the economics worked out roughly as follows:

·HYV Rice (30 quintals)	Rs. 3000
Wheat (20 quintals)	Rs. 2400
Green gram or vegetables	Rs. 2000

Straw	<u>Rs. 1000</u>
Value of gross production	Rs. 8400
Less cost of cultivation (at 50%)	<u>Rs. 4200</u>
Net Income	Rs. 4200

If the poverty level for a family in India is drawn at an annual income of Rs. 4000, it is evident that the AI's three-crop cycle can lift irrigated three-acre farmers above it. Breaking the mono-crop pattern, however, depends on making irrigation available. The AI's efforts in this direction will be described later.

### *Cotton*

The AI undertook in 1958 adaptive trials on Laxmi Cotton, a crop until then considered unadaptable to the coastal soils. However, the AI seems to have decided to de-emphasize cotton since the crop does not seem to be suited to the Konkan soils. Whatever cotton is grown now is primarily for training purposes.

### *Poultry*

The AI is on the point of releasing a new breed of poultry birds which it is proud to call "Kosbad Breed." Four English breeds (White Leghorn, Rhode Island Red, Black Australorp, and New Hampshire) are crossed with native breeds to produce a variety that is claimed to have the following attributes: early maturity, greater yield, greater resistance to diseases, greater adaptability to local conditions, and greater acceptability. The original Kosbad breed was white in color; because Adivasis need dark-colored cocks for sacrificing to the gods, a dark-colored breed has been produced.

### *The Surface Well*

A simple piece of research is the surface well (known outside as the Kosbad-type well) developed in 1969. A surface well is a shallow cone-like structure, with a 60 foot diameter and a 16 foot depth. The main purpose of the well is to collect the running rain water and allow its use whenever the rains fail and the crop is in danger of being lost. An incidental benefit is that the running water brings along with it leaves and dung, and the silt thus formed in the well is very useful as manure. About 25 cartloads of good quality manure is obtained every year from each surface well. The cost of construction is between Rs. 700 and Rs. 1000. About 15,000 liters of water are conserved in one well. A simple hand pump, costing approximately Rs. 500, is good for the irrigation of one hectare.

## EDUCATION AND TRAINING

The educational centers of the AI are described below in the chronological order of their establishment.

### *The Agricultural School (Krishi Vidyalaya), Kosbad, 1949*

The Agricultural School started at Bordi in 1947 and was shifted to Kosbad in 1949 to train young farmers in Thana District in scientific agriculture. The school admits 90 boys and offers a two-year program in Agriculture, Animal Husbandry, Fruit Gardening, and so forth. In addition, such subjects as Cooperation, Public Health, Social Education, Applied Nutrition, and the Working of the Revenue Department are also taught. There is a heavy emphasis on practical training conducted on the Institute's farm growing food and horticultural crops and accommodating both a dairy and poultry. Each student receives a stipend of Rs. 40 per month and two sets of uniforms. Successful candidates obtain a diploma from the Konkan Agricultural University and become absorbed by the Department of Agriculture of Maharashtra Government, or as Gram Sevaks (Village Level Workers).

### *Residential Primary School (Ashram Vidyalaya), Kosbad, 1958*

About 120 Adivasi boys and girls receive primary education at the Residential Primary School where work experience in agriculture and village crafts is provided.

### *Mahatma Gandhi Tribal Youth Training Center (Mahatma Gandhi Adivasi Janata Vidyalaya), Kosbad, 1959*

This center is a training school, the first of its kind in India, for young and exclusively Adivasi farmers from five districts: Thana, Kulaba, Nasik, Dhule, and Jalgaon. No diploma or certificate is awarded, and the students are expected to go back to their farms. The school offers a long term course of one year and a short term course of four months. About 160 students are admitted every year.

### *Panchayat Rajya Training Center (Panchayat Rajya Prashikshan Kendra), Kosbad, 1962*

This center gives short courses of about a week's duration and three-day courses in peripatetic camps to Panchas (members) and Sarpanchas (chairmen) of the village councils. The courses include village planning, agricultural production, health, Panchayat Law, and social education. Panchas and Sarpanches from Thana, Kulaba, and Nasik Districts attend them.

An incidental advantage afforded AI by this Center is that through the representatives of local government attending the Center it can keep in touch with developments in these three

districts that have large concentrations of Adivasis. It can also propagate its innovations in the process.

*VLW Training Center (Gram Sevak Prashikshan Kendra),  
Kosbad, 1964*

This center caters to the inservice training needs of Village Level Workers from six districts of the Bombay division and emphasizes training in agricultural production and extension in its refresher courses. One is an "upgraded" course for one year, and the other a short duration course.

*Middle School (Madhyamik Vidyalaya), Kosbad, 1965*

The Middle School at Kosbad has attached to it one boys' hostel and one girls' hostel. Agriculture is given an important place in the program, and for this purpose youth clubs have been established. These youth club groups are given projects like poultry keeping, vegetable gardening, and animal care.

The students are also trained in social service. With this aim in view the school has adopted two padas, Ghatalpada and Dalvipada, where the students go and help the farmers. In Ghatalpada there is a community irrigation well serving twelve families, and students help them with the planting of new seeds and vegetables. In Dalvipada they are helpful in the development of kitchen gardening and horticulture, especially with a view to improving the Adivasi diet.

*Residential Primary School (Ashram Shala),  
Social Welfare Center and Seed Production Center,  
Waki, 1971*

The school located in Waki, about 2½ km. south of Kosbad, has an attached farm on a 35-acre plot donated by the government of Maharashtra where vegetable and fruit seeds are produced.

The Sydenham College of Commerce and Economics, Bombay, runs a Social Welfare Center at Waki and provides medical facilities. The AI gives its guidance to the volunteers of the College.

*Applied Nutrition Training (under the VLW Training Center),  
Kosbad, 1966*

This training activity of the AI has been organized to help the Government of Maharashtra run its Applied Nutrition Program (ANP), which started in 1966 in all the districts. In each district two blocks, and in each block ten villages, are chosen. In each village three to five acres of land are acquired by the government, and a well is dug. Fenced and fitted with pumps, the land is handed over to the Gram Panchayat (village council) for cultivation

of supplementary foods like carrots, sweet potatoes, tomatoes, and other vegetables. The produce is supposed to be used for schoolchildren and expectant and nursing mothers. Each plot is supposed to become self-sufficient in five years after which government aid ceases. There are nine Gram Sevak Training Centers (GSTC) in Maharashtra, each of which looks after the training needs of surrounding areas. The Kosbad GSTC has two coastal districts (Thana and Kulaba) and two plains districts (Nasik and Jalgaon) attached to it.

The GSTC trains at its headquarters, the principal Gram Panchayat personnel connected with Applied Nutrition Training programs. In addition the GSTC holds peripatetic training camps for other personnel and supplies seedlings to ANP agricultural plots.

*Agricultural Technology Center  
(Krishi Vigyan Kendra), Kosbad, 1977*

This is the latest activity added to the already long AI roster. The funds come from the Indian Council of Agricultural Research and the objectives of the Kendra are to train practicing farmers in practical aspects of agriculture, to train functionaries engaged in agriculture and agro-industries, and to train landless people in agro-industrial occupations. On the whole the functions of the Kendra seem to be the same as have been pursued over the years already by AI, but the additional funds make possible a broader coverage.

A sample of what is done under the Kendra for encouraging grafting of local mango trees with Alphonso variety is as follows:

The Krishi Vigyan Kendra...formulated a course in grafting of mangoes. The course was of one week's duration. One hundred and twenty tribal farmers having mango trees attended. Sufficient practice was given to each of them for acquiring necessary skills in grafting. The Kendra supplied them with budsticks of Alphonso variety. The tools like grafting knife, secateur, and chisel were supplied on loan. The training was so effective that during August to October the trainees carried out over 1500 graftings. Besides, two youths were self-employed as grafters and earned Rs. 600 each.

### *Nonformal Educational Activities*

In addition to the above, several nonformal educational activities are being conducted by AI.

*Functional Literacy Classes.* In 16 padas classes in functional literacy are held once a week between 12 noon and 2 p.m. Groups of AI staff and students have been assigned to these padas. Lessons are prepared beforehand, cyclostyled, and discussed in a meeting of the entire group of "teachers" every Saturday, and the classes are held every Wednesday. In classes attended by men and women of all ages, emphasis has been on sanitation, personal hygiene, and agricultural improvements.

*"Udyan Shalas."* On many agricultural and horticultural estates run by rich farmers, children work the whole day and have to go without education. Noting this predicament, some AI workers started evening classes on the estates themselves with the permission of the estate owners. However, the experiment could not continue long because the estate owners later withheld cooperation.

*Night Classes.* In Dalvi Pada and Brahman Pada classes are held for working girls and boys every night from around 8:30 to 9:30. The children, who are employed plucking lily flowers planted in the chikoo plantations, do their work in the early morning. After class, the children go to the plantation around 10:00 p.m. and sleep there to be awakened around 1:00 a.m.

*Mahila Mandals and other Clubs.* In all the adopted villages Mahila Mandals (women's clubs), youth clubs, and libraries have been established. Kitchen gardening is taught to members of women's and youth clubs. Mahila Mandal members also get some training in knitting and stitching. These activities are looked after by students of various educational centers of the AI.

### TECHNICAL AND LOGISTICAL ASSISTANCE TO LOCAL FARMERS

#### *Supply Activities*

Among the supply activities that the AI organizes, the supply of horticultural crops and seeds is especially important and deserves attention here.

As noted above, the coastal region is deemed suitable for the development of horticulture. The hilly terrain, the humid climate, and the laterite soil are suitable especially for mango, chikoo (*Achras sapota*), coconut, papaya, and banana plants. To induce farmers to grow these plants is, therefore, one of the important programs of the Institute. As a first step towards this the Institute established a nursery in 1949 with a view to providing seedlings

to the farmers.

Chikoo was found to be the most suitable plant for this region. It is a so-called "rolling economy" with year round bearing and gives a steady gross income of Rs. 120 per year per tree for a very long period. About 50 plants can be grown in one acre. With the production cost at roughly half the gross value of the output, the net income per acre per year comes to about Rs. 3000.

Coconut comes next. A ten-year plant yields on an average an annual income of Rs. 150. One acre can accommodate about a hundred plants. Thus gross income per acre will be in the neighborhood of Rs. 15,000 according to AI calculations; with the cost of cultivation at roughly 40 percent, the net income from an acre of plantation would be Rs. 9000. Besides the fruit, the leaves are useful for making carpets and baskets. and for covering huts.

Both chikoo and coconut require irrigation. The AI advises those who do not have irrigation facilities to grow mango and *bor* (a kind of berry) trees, for which AI has developed the most effective and simple grafting and budding techniques. The branches of superior quality plants, such as Alfanso mango and the Ahmedabadi variety of *bor*, are provided free for the purpose of grafting and budding. A ten-year old mango tree, developed in this way, yields on an average Rs. 200 per year for over sixty years. An acre can accommodate 50 trees. With the cost at 50 percent, the potential net income per acre would be about Rs. 5000. The *bor* tree, which also does not require irrigation, yields an annual income of Rs. 25. About 50 of these trees can grow on an acre.

Papai (papaya) known as a poor man's fruit, is also being popularized. Its important feature is that it is quick-growing. By preparing seedlings in bamboo baskets the Institute saves about two months' time.

In addition to the above the AI supplies improved chicks and hatching eggs as well as seeds and seedlings of new varieties of rice, improved grasses, and better varieties of vegetables (e.g., onions, brinjals, chillis, cauliflower, tomatoes, soybeans, spinach, beans of many varieties, bottle gourds, snake gourds, and ridge gourds). All these items are priced, but the Adivasis in nearby villages get some items free, or at a low cost.

#### *Extension Channels*

AI has only one full time extension worker, but its extension work also involves most of its trainees. The important channels of extension are the following:

- (1) New technology and cultivation practices provided to farmers by Middle School students through the medium of their youth club groups. All trainees participate in extension as part of their training.

- (2) Demonstrations on the Institute's farm as well as directly on the land of farmers.
- (3) Formal training given to neighboring farmers in very short courses. For example, in being introduced in the cultivation of chillis, a cash crop, farmers are trained in groups for two or three days at a time at each critical stage of chilli growth.
- (4) The establishment of credit at banks (a recent service) for farmers attending the short courses.
- (5) Provision of extension services to users of community and individual wells and to farmers in the "adopted" villages.

#### DEVELOPMENT PROGRAMS

The AI provides special attention to what it calls "adopted" villages in a radius of about 10 km. They are (1) Kainad (of which Kosbad is a pada), (2) Waki, (3) Zarli, (4) Chimbave, and (5) Asawali. The villages and their padas together consist of about 750 Adivasi families.

The principal development program involves the construction of wells, which was begun in 1960 but was given special impetus in 1966.

##### *"Community" or Joint Use Wells*

The AI has constructed eight community wells for small Adivasi farmers in six surrounding padas of which seven are functioning. The well is constructed in a central place in the farm of one of the beneficiary farmers and about ten or twelve neighboring farmers having a total acreage of 20-25 acres take advantage of these wells. The costs of construction, land, leveling, pipelines, pumps, electricity, and so forth are borne by the AI, which also manages the distribution of water. The wells are not community wells in the sense of being owned and operated by the consortium of small farmers; they are owned by the AI for the *collective use* of the participating farmers.

##### *Individual (dug) Wells*

About 100 wells have been constructed for individual Adivasi farmers, of which 52 have been fitted with pumps and are in working condition.

Agency for International Development  
Library  
Room 1656 NS  
Washington, D.C. 20523

### *Surface Wells*

About 25 surface wells (described on p. 33) have been constructed, but most of these have since been converted to dug wells.

The purpose of these wells, particularly of the community and individual dug wells, is to make multiple cropping possible and help the Adivasi farmer cross the poverty line. Those having wells are helped with all the other aids including the supply and extension services and the nonformal education programs described earlier as well as the better living programs described below.

*Subsidiary Occupations.* To aid development further subsidiary occupations such as beekeeping, poultry, pisciculture, piggery, and bakery, are encouraged.

## EFFORTS TO IMPROVE FAMILY LIVING

The AI has been sensitive to the great need for devices that will improve family living. The following paragraphs describe five efforts that are intended to contribute to better living conditions.

### *Drinking Water Wells*

In fact the AI's well construction program started with drinking water wells, of which five are already in existence. In addition, the AI has recently undertaken an expanded program of construction of drinking water wells in surrounding villages. For this purpose it organizes work camps of about seven to ten days' duration. Members of the AI staff and students of Gram Sevak Training Center, Adivasi Janata Vidyalaya, and Krishi Vidyalaya participate in the work.

### *Smokeless Stoves*

The typical Adivasi hut is without much ventilation and the traditional cooking stove, which ordinarily consists of three stones and firewood, fills the entire hut with smoke that affects the health of the household. The smokeless *chulha* (stove) is a simple cement stove to which a chimney is attached. The model was prepared many years ago by Krishnadas Shah, an expert on rural sanitation. The AI tried to popularize it about six years ago, but the attempt was not very successful. Within the past few months a fresh effort has been made, and the new smokeless stoves called "Magan Chulha" have been constructed in seven Adivasi huts.

### *Glass Panel Fittings*

Just as the Adivasi huts are without ventilation, so are they without much light. The AI has fitted the walls and roofs of eight huts with square glass pieces in wooden frames.

*Utilization of Human Waste*

To turn human excreta into manure, several innovations such as low-cost latrines, absorbent urinals, and compost pits are the subjects of experimentation. These innovations serve both sanitary and agricultural purposes. The AI has constructed a "museum" in which various kinds of low-cost, double purpose toilets are on display.

*Gobar Gas Plants*

The AI is now making a special effort to popularize the Gobar Gas Plant, a new application of "appropriate technology" that utilizes both human and animal waste and provides both organic manure and gas for cooking and lighting. An additional advantage, of course, is cleaner surroundings. The Maharashtra Khadi and Village Industries Board gives a 75 percent subsidy to Adivasis on the costs of construction and equipment, and the AI ordinarily meets the other 25 percent as the Adivasi farmers cannot afford even that. Seven constructions have already been sanctioned by the Board, and the digging of pits has started in two cases.

To sum up, over the past 30 years the Agricultural Institute at Kosbad has initiated a wide variety of applied research, education and training, and direct development activities aimed at improving the productivity and quality of family life of rural people, ranging in service areas from clusters of nearby "adopted" hamlets to the much larger rural areas of five districts. The Institute has given special attention to assisting the Warlis, but they constitute only a part of its total "clientele." Although AI is a private organization it has served many governmental purposes, including the training and upgrading of Village Level Workers employed by the State of Maharashtra, and in return it has received substantial governmental financial support for its various activities. In the next chapter we will attempt to assess the practical impact of some of these activities, especially on the lives and living conditions of the Warlis.

IMPACTS OF THE  
AGRICULTURAL INSTITUTE'S PROGRAMS

Because of the bewildering variety of AI's program activities and the diversity of its clientele, it has seemed best to focus this assessment of results on AI's "development program," particularly as it applies to the Warlis in the neighboring "adopted" villages and with special attention to the various activities built around the dug wells. This focus has the advantage of bringing the most basic and complex problems of the Adivasi into sharper perspective, and the further advantage of requiring an examination of the effectiveness of important aspects of AI's research, supply, extension and "better living" activities. At the same time, of course, this choice of focus means foregoing any extensive assessment of the impact of AI's numerous activities beyond the Adivasi villages close to Kosbad.

IRRIGATION AND  
AGRICULTURAL PRODUCTION

Improved water supply, as noted earlier, is the key to taking advantage of many of the improved agricultural technologies developed and promoted by the AI. In an effort to break this crucial bottleneck the AI had constructed 100 individual (dug) wells, 25 surface wells and 8 community wells on Adivasi lands in nearby villages. Inasmuch as most surface wells have now been converted into dug wells (only 4 or 5 are still in use), they have not been included in this survey. Thus our assessment of the development program centers on the individual and community dug wells.

Out of the 100 individual wells, only 52 are in working condition; the rest either have no electric connections or, if so, no irrigation equipment.<sup>1</sup> Of the 52 wells that are usable, only 45 are actually used.<sup>2</sup> We are thus left with 45 wells and their users, in

---

<sup>1</sup>These wells were dug in anticipation of a government program for electrification which was later suspended.

<sup>2</sup>Of the seven unused wells, two belong to farmers who have left their villages and migrated to Bombay; two belong to confirmed drink addicts; the other three remain unused because of quarrels over land.

villages containing approximately 750 families or a total population of perhaps 4,000 to 5,000 persons.

The total operated area of these 45 farmers comes to about 204 acres, of which (1977-78) 127 acres are devoted to paddy (both traditional and new varieties).<sup>1</sup> Roughly half of this paddy acreage is irrigated. The land not in rice is partly cultivable (*warkas*) and partly devoted to fruit and other trees.

One common complaint of the farmers is the shortage of water; well-water, in most cases, seems to last only until about the end of February, thus making it very difficult to support rabi crops in the dry winter season, prior to the return of the monsoon rains around June. Many farmers wanted their wells to be dug deeper. When questioned on this the AI workers pointed out that the neighboring large estate owners bored their wells deep--sometimes 100 to 150 feet--enabling them to secure more water but at the expense of Adivasi farmers with shallower wells. It is apparent that as more and/or deeper wells are dug, the water table will recede further, to the increasing disadvantage of small cultivators.

It is instructive to see what has happened to the three-crop cycle recommended by the AI. Although most farmers (43 out of the 45) who are supplied with well water took the new rice varieties (Jaya, Taichung, and Ratnagiri), of their 127 acres under paddy only 35.5 acres (28 percent) were devoted to these HYVs. On the rest of their land (91.28 acres, or 72 percent) local low yielding varieties continue to be grown, despite the fact that the average yield of the new varieties was about 16.7 quintals per acre as compared to about 7 quintals for local varieties.

The second recommended crop in the cycle, wheat, which for a time was enthusiastically promoted by the AI, shows even less acceptance than HYV paddy. Only 28 farmers planted wheat on about 25 acres in all. Actually the AI was forced to change its opinion about the suitability of wheat, which cannot thrive in the absence of cold weather and ample water or withstand the rust attacks that have become common. Chillis and sundry vegetables are replacing wheat under the new AI emphasis. Thirty-one farmers took vegetables on about 9 acres of land; thirty-six took chilli on about 8.5 acres. It should be noted that chilli, sown in October or November, may be repeatedly harvested until May. But here again, the great limitation is water; chilli requires many irrigations. But even with scanty waterings until about February, the crop is profitable and, on the whole, chilli seems to be catching on. It is also a cash crop and has, therefore, a special appeal.

---

<sup>1</sup>These and following observations have been made on the basis of an analysis of schedules canvassed with these 45 users, personal interviews with 16 of them (including an inspection of 14), talks with officials and workers of the AI, and a few others. Although firm conclusions are not possible because of only one year's data, the main problems emerge sharply.

One hardly comes across summer green gram, the third crop in AI's originally recommended three-crop cycle (along with vegetables). Only three farmers took it on a total of 0.5 acres. This scant acceptance obtains partly because the chilli crop is of much longer duration and partly because water is not available in summer. Furthermore, the Adivasis are apparently not accustomed to consuming it.

On the other hand, many farmers use the horticultural innovations--Alfanzo mango grafts, papaya, plantains, bor, coconut, chikoo. In fact, fruit trees seem to be very popular. Our 45 farmers together have about 400 mango, 400 chikoo, 550 coconut, 130 bor, 270 guava, 150 banana, and 18 lemon trees--though it was difficult to judge how many of these trees were improved varieties.

On the whole, it may be said that the irrigation program has been only partially successful and the three-crop cycle has not succeeded, mainly because of water shortage. Nevertheless, some change has been achieved by way of diversification of the cropping pattern and the production of nontraditional crops.

It is possible to attempt a rough estimate of the gains enjoyed by the individual well users (who are a small minority of the local Adivasi population). Cash income from the sale of vegetables and fruits has been reported by 40 out of 45 farmers. As many as 16 reported cash incomes exceeding Rs. 300 per year, and 6 of these claimed earnings of more than Rs. 1000 in the year 1977-78. As a result of the construction of wells and change in the crop pattern, 17 farmers report increases in their gross income of more than 50 percent. Nine have more than doubled it.

Increased income has led to improvement in diet, repair of houses, more adequate clothing, and better household utensils. Thirty-five farmers have put up cactus fences. Five have carried out land improvements such as bunding and leveling. Many have been enabled to send children to school.

Inasmuch as most of the wells started operating between 1966 and 1977, it may be said that the gains enjoyed are the result of about ten years' work, which makes the results look pitifully small and well below the income potential projected by AI. It must be noted, however, that the picture would have looked somewhat better if the price of rice had not dropped drastically, from about Rs. 200 to about Rs. 85 per quintal, over the last few years, if input prices had not gone up, and if supplies of chilli, which were a bottleneck, had been greater.

Possibly ten of the 45 farmers could be classified as really "good" in the sense of being comparable in efficiency to industrious farmers in other areas. Their farms are well tended and have a prosperous look. They have most probably crossed the "poverty line." But unfortunately they comprise but a tiny fraction of all the cultivators in the area studied.

Turning from these individual well-users to community wells, we found that only five of the eight community wells are in use. Fifty-four farmers are members of the active community wells but only 29 actually use the water. A study of 16 of these revealed that their total acreage in the command area is 39 acres or roughly 2.5 acres per farmer. In rabi about 15 acres get water, or 41 percent. Each of sixteen farmers has gone in for Jaya on very small acreage; twelve were found to be taking wheat (K-Sona), also on a very small acreage. Because of the small acreage devoted to new varieties, the improvement in yields is marginal. Thirteen take some vegetables like onion and chilli, and all of them have reported cash incomes ranging from Rs. 20 to Rs. 550. Average cash income for the 16 farmers comes to about Rs. 140 per year, which is slight improvement over pre-irrigation days.

On the whole, the available evidence shows that the performance of the community well users has been inferior to that of the individual well users. This is hardly surprising because users of the community wells are the more typical of the area; these wells cater to whatever farmers happen to be in their command area whereas the sample of farmers with individual wells is more selective and could be expected to be more productive.

Further, it must be pointed out that even the above picture is somewhat deceptive, for whatever improvements are visible on the farms is not due entirely to what the farmers themselves have done. The workers, trainees, and the Extension Officer of the AI go round the farms inducing farmers to adopt the innovations and often doing some of their work for them. In the beginning, when the well construction program was taken up, there was great resistance to the idea on the part of the Adivasis, and this resistance was compounded by the propaganda of local vested interests that the Institute was nothing but a new landlord who would eventually take away the land. Now after the construction of so many wells and the work of the AI for over thirty years, the Adivasi's fear of forfeiting his land may be assumed to have vanished; and yet in all these years, as Jayant Patil has told us, no farmer has come forward to ask for a well. Even today very few farmers would come on their own to report a pest attack; the AI people would have to spot it and then induce the farmers to take remedial action, or do it themselves. In the command areas of community wells there are about six farms that are tended not by the owners but by other farmers or the AI itself. Patil himself has wondered how much of AI's work would last if it were to shift elsewhere. In a total of about 100 farmers using both individual and community wells, not more than 15 could be classified as really good farmers, in the sense of their being devoted to their vocation. The slight "break-through" that is apparent on the farms is thus somewhat deceptive; the socio-psychological breakthrough bringing about a change in attitudes is meager.

It might be thought that the wells would be uneconomical for these farmers with very small holdings, but in at least this particular

instance this is not the case. According to AI calculations, a well that costs around Rs. 10,000 (Rs. 12,000 at today's prices) can pay itself off on a holding of at least five acres, excluding *warkas*. Here the average holding of paddy land is only about 2.76 acres, but the wells are practically a free gift to the farmers. Thirty-five wells (and pumps) were 75 percent subsidized by the Social Welfare Department of the Government of Maharashtra with the AI financing most of the remaining 25 percent (the farmer having to pay only Rs. 200 to 300). Seventeen wells fitted with pumps and pipelines were donated free by foreign agencies; Community Aid Abroad and Freedom From Hunger accounted for the currently usable wells. Of the remaining 48 wells, Oxfam gave 30 and Community Aid Abroad and Freedom From Hunger gave the rest. It was the idea of Community Aid Abroad to recover the cost of the wells from the farmers in easy installments and to create a revolving fund from which further wells could be constructed, but in no instance has any money come back from the farmer.

#### REASONS FOR LIMITED AGRICULTURAL IMPACT

What are the factors that account for this limited impact? The most striking thing witnessed about the new varieties of paddy, as noted above, is that although the number of adopters among individual well users is large (93 percent), the coverage in acres is small (28 percent). In community wells also the number of adopters is large, but the area covered is small. The reasons given by the farmers for this small coverage are: (1) many lands are "light"; their moisture-retaining capacity is very low, suitable only for very early-maturing local varieties; (2) water itself is in short supply; (3) expenses are prohibitive, especially fertilizer; and (4) the rains wash away the fertilizer.

The AI workers counter these complaints by pointing out that: (1) the AI has varieties like Blue Belle and Karjat-184 that are suitable for light soils, but the farmers do not use them; (2) in rabi, although water is in short supply, the well can give supplementary irrigation; during kharif (the monsoon period) there is no technical reason why high yielding varieties (HYVs) should not be grown on a much larger area; in many cases the available water is often not sufficiently used; (3) although the AI until recently did not take much initiative in arranging crop loans through banks, this service is now being offered; however, the AI had always been ready to help with fertilizers on a credit basis; and (4) the notion that the rains will wash away the fertilizer is an irrational fear.

In attempting to explain the real reasons for limited impact, the AI observers point unerringly to the idiosyncratic Warli attitude. Important in this context seems to be the average Adivasi's preference for wage-employment over self-employment (farmers can earn 4 or 5 rupees a day on some of the many estates and plantations in the Kosbad area). The typical Adivasi, it is said, is a fairly good wage-worker but an indifferent cultivator; he has no initiative, no desire or ability

to make his own decisions. (A Christian father working in this area for many years suggested that the AI would do well to take over all the Adivasis' farms and employ them as wage earners.) This reluctance to work his own farm intensively may be due in part to the fact that, except for the last twenty years or so, the Adivasi, for several generations, has worked as a tenant under instructions of the landlord rather than as an independent owner-cultivator. AI observers further point out that the Adivasi's faith is in the "immediate"; he prefers a tangible daily wage to a vague expectation of seeing his agricultural investment bear fruit in the distant future.

The drinking habit is generally cited as a further deterrent to increased agricultural productivity, though local observers differ widely in their estimates of the extent of the drinking habit and its effect on agricultural activities. There are two extremes of opinion: one holds that the extent is not such as to seriously hamper agricultural work; the other, that it is great enough to be the main evil. Our own observations suggest that the truth probably lies somewhere in between. Judging from our limited sample we would conclude that at least 15 percent of the farmers are probably drinking so much and so frequently that their agriculture suffers through both the physical and financial effects of drinking.

At a deeper level, there is the "lethargy" and "lack of initiative" of the Adivasi about which frequent complaints are heard. However, one does not know how much of this "lethargy" is caused by drink, undernutrition, niggardliness of nature, absence of faith in human effort arising from a belief in aerial spirits and witchcraft, absence of the "thought for the morrow" (described as a deeply ingrained Adivasi habit of mind), racial memories of the life of hunting, and reluctance to do concentrated work in a narrowly confined area.

As in many other peasant societies, here also any one "getting ahead" in the world often becomes the object of his fellowmen's jealousy. Such an attitude generates social pressures that stand in the way of those few who would like to break new ground. A better farmer may occasionally become the victim of drunken abuse from fellow Adivasis; occasionally his crop may be stolen. Two such specific complaints were heard.

#### *Some Exceptional Success Cases*

Although the AI's long and varied efforts to improve the life of the Warlis appear to have had only limited and rather disappointing results, it should be noted that signal success has been achieved in a number of individual cases. For an understanding of the factors involved, a brief description of eight of the best farmers follows:

- Janu Ravji Dalvi (who takes three crops) is also employed in AI's dairy, his son in the GBSK press, and his daughter in the GBSK Vikaswadi.

- Barkya Chaitya Ibhad, as well as farming, is employed in the GBSK workshop.
- Raddhya Kakdya Dhak had the experience of working in Bombay for several years.
- Babu Udharya Bujad, an agricultural graduate and a trained secondary teacher, is also a first rate self-employed farmer.
- Govind Lakshman Valvi is educated up to the sixth form and has undergone an agricultural training course of the AI's Janata Vidyalaya.
- Devji Barkhya Hadal was a worker of the Communist Party for eighteen years and, in connection with Party work, has traveled to Kerala, Madras, and Bengal.
- Dattatraya Chaitya Varatha has done his Secondary School Certificate examination and obtained the Agricultural School Diploma.
- Radkya Vadhan has been trained since Balwadi in GBSK and completed the agricultural course of the Janata Vidyalaya. His grandfather had started as a Communist, then come under the influence of Acharya Bhise, one of the founders of the Gokhale Education Society. His father was a carpenter in Bombay. His two sisters, like him, have gone up from Balwadi, been trained, and are now themselves Balwadi teachers.

Three factors seem to characterize these "success cases": (1) substantial educational experience, (2) exposure to the outside world, and (3) experience with nonfarm sources of income. Of these three, the educational exposure appears to be especially crucial. It is not without significance that, against the average Warli literacy rate of about 8 percent, the literacy rate among community well users is 25 percent and among individual well users 65 percent.

#### IMPACT OF BETTER LIVING PROGRAMS

Better living programs such as fitting glass-panels in the roofs, introducing smokeless stoves, improving latrines, and building Gobar Gas plants do not seem to have caught on in spite of efforts to propagate them. Occasionally smokeless stoves may be seen, but not in use. Improved latrines and other sanitary devices are not to be seen anywhere. Of the eight gas plants planned, two are under construction; therefore nothing can as yet be said about their final acceptance.

On the whole, other development programs concerned with improved living and supplementary income have had a meager response, the reasons for which, as suggested below, seem to be partly economic and partly social.

- Reference was made earlier in this account to the new white breed of poultry and the cultural resistance to accepting it. A dark-colored breed released recently is reported to have been accepted by four farmers.
- The Khadi and Village Industries Board has been trying for the past fifteen years to propagate beekeeping as a subsidiary occupation in this area in cooperation with the AI. Of the 150 boxes fitted so far, only three have been acquired by Adivasis. One reason given is that, unlike the large estate owner, the small farmer cannot guard the boxes against theft for lack of a watchman. Another advantage of the large plantation owner is the easy availability of flowering trees within his estate. The Adivasis' paddy land does not attract honey bees, unless there happen to be flowering trees or plants in the vicinity.
- Stylo grass which gives 17 percent protein cannot be grown unless a separate plot is reserved for it. The Adivasi would not devote part of his meager paddy land to the production of grass.
- The Warlis do not believe in milking cows. Therefore, although the AI has a dairy in which high-yielding cross-bred cows are kept, not more than four farmers have acquired new cows. (There may be other obstacles such as feed costs and marketing difficulties.)
- Since 1964 the AI has been trying to encourage the adoption of stall-fed goats (Bannur variety) which would give good income to farmers as well as prevent free rummaging that is destructive of flora and soil. There has been no acceptance of this offer.
- The planting of mangoes and chikoos, as seen earlier, has been relatively more popular and probably indicates a potential for further development. But here too the collection of small quantities of fruit from a large number of farmers may present marketing difficulties.

## THE EDUCATIONAL PROGRAMS

### *Nonformal Education*

Most important in terms of the general local population, at least potentially, are certain of the nonformal education programs.

The adult education program in functional literacy, started in December 1977, covers 16 padas. A visit to two of the classes was disappointing. At one pada the four adults were drunk. The teacher was trying to explain to them the care that should be taken with pest attacks, but it seemed unlikely to have made any impression on them. A few women were amusedly peeping out to watch the proceedings,

but when an attempt was made to engage them in conversation, they disappeared into the huts. At the other pada nobody was present. These padas, it should be noted, are very close to the Institute: one is less than a half kilometer; the other is so close as to be almost part of the AI campus. Although it would be wrong to generalize from this experience, the indifference and unconcern shown by the Warlis in these instances was obvious.

Our visit to two of the evening classes was more heartening. They were attended by children, more girls than boys, from the age of five to thirteen or fourteen. After their class the children had to spend the night at a private estate to wake up at 1:00 a.m. and go about their duty of plucking lily flowers; yet none of them looked tired. The subjects discussed by the teacher related to personal hygiene combined with reading skill. The children responded to what they learned with enthusiasm.

As observed earlier, Udyan Shala, another evening nonformal program, had to be closed after one or two attempts because of the non-cooperation of the estate owners.

In so far as the lesson planning for these night school programs is concerned, it would appear that the work has been done intelligently and efficiently. Lessons are carefully prepared and circulated in advance. The content is such as to interest the students and convey to them a message. For example, because personal hygiene is a serious problem in these areas, lessons revolving around this theme are important. Because the Adivasis' inability to count or to comprehend weights and measures is a serious handicap, simple corrective measures were among the first lessons of the short-lived Udyan Shala. Letters making up the Marathi word for "weight" were introduced. In another instance words equivalent to "plant a tree" were introduced in a discussion of the importance of planting trees in an area where forests have been indiscriminately cut by the Adivasis for fuel and other needs.

There is also a neat and well-run Balwadi near the AI's campus, some of whose "alumni" have made good, as noted above. Close to the AI's farm in beautiful surroundings, the children play in a specially constructed structure that is open on all sides.

In all the years since its inception the AI has been holding farmers' one-day gatherings, and thousands of Adivasi farmers come to participate and view the AI's innovations. We have no basis, however, for evaluating their practical impact.

From this limited observation of these nonformal education programs it is difficult not to conclude that the lower the age group the AI addresses in its local educational activities for Adivasis, the more effective it is likely to be, especially from the point of view of the keenness of the recipient. One wonders whether the adults are, by and large, a lost generation and whether anything can really be done to give them the enthusiasm and zest of their children in whom there is great hope.

### *Agricultural Education and Training*

Although the focus of this study is on Adivasi development in the immediate neighborhood of AI, the agricultural education and training activities addressed largely to clientele outside this area deserve brief comment. These, it will be recalled, include:

- (1) *The Agricultural School (Krishi Vidyalaya)* that caters to the needs of students throughout the Thana District;
- (2) *The Mahatma Gandhi Adivasi Janata Vidyalaya (Tribal Youth Training Center)* that serves three districts;
- (3) *The Gram Sevak Prashikshan Kendra (V.L.W. Training Center)* that looks after the needs of the same three districts as the Tribal Youth Training Center.
- (4) *The Pachayati Raj Training Center* that trains officials and popular representatives of local government authorities in three districts; and
- (5) *the Applied Nutrition Training Program* that caters to officials from two districts.

Certain facts about the effectiveness of these programs stand out. First of all, AI has established a reputation for itself as a leading training center. Owing to its pioneering work in many areas of agricultural development, it has been described by a former Chief Minister as the "Mecca" of Maharashtra's agriculture. Its attendance is high and its trainees are widely credited with being good performers.

Second, the fact that AI's Agricultural School is privately operated gives it an advantage over government schools in terms of staff continuity; the more experienced faculty members are nontransferable and hence more stable. For example, Jayant Patil, the Principal of AI, has been in residence from the beginning (29 years) and Principal for 10 years. M. S. Gupte, head of the V.L. W. Training Center, has been on the job for 20 years; Dr. M. V. Modak, whose concern is animal husbandry, dairily, poultry, and veterinary problems, has been in his position for 12 years. A. H. Sankhe, who looks after the adult and other nonformal education programs, has been associated with the Gokhale Education Society for many years with a few interruptions, and his close knowledge of and identification with Adivasi life has made him a particular asset to the Institute.

Third, the fact that the AI has a model farm and its own research activities makes it the envy of all other institutes. Moreover, in all AI courses there is a strong emphasis on practical training and direct involvement in extension work, which cannot be said of many agricultural training institutions. Its effectiveness is further enhanced by the extensive use of helpful teaching aids such as hand-outs, folders, and audio-visual aids.

Our limited interviews with students and trainees brought to light the following facts that may or may not be representative. In a meeting with students of the Agricultural School it was clear that the boys wanted to secure salaried jobs which their diplomas might ultimately earn them; none was intent on making a career on his own farm. Students of the Janata Vidyalaya (for tribal youths) were asked if they knew what any of the former trainees were now doing. Of the nine cases they cited, five had taken up jobs away from home and the remaining four continued to cultivate their lands, but in the traditional manner. When asked why modern practices learned at the AI were not carried to the fields, they spoke of the unavailability of irrigation, lack of credit facilities, and corruption in the financing institutions. It also came out that the Adivasi boys coming from four different districts did not benefit equally from the AI's training because of differences in their ecological conditions and crops. Some of the VLWs also said that crops specific to their areas would not benefit much from the training they had received; however they had found the basic agricultural training useful and were happy about it. It must be noted that these comments refer to specific programs and specific aspects and are not offered as a general critique of AI's outward-directed activities, which was beyond the scope of our study.

Our overall impression--admittedly based on fragmentary evidence--is that the AI's agricultural education and training programs reviewed above have probably had a substantially greater impact on the general run of cultivators outside the Kosbad area than on the Adivasi cultivators within AI's immediate vicinity. However, the great diversity in ecological conditions, crop patterns and other features of the different districts served by these various AI programs would appear to be a serious inhibiting factor on their effectiveness. One gets the impression of an overall program that has grown more by accidental accretion than by a process of coherent evolution. Perhaps this is the price that a good quality private institution must inevitably pay when a sizeable portion of its total activities are funded by different government agencies whose needs and interests do not coincide.

#### MANAGEMENT ASPECTS

The generally low impact of AI's development activities on the neighboring Warlis, as we have seen, may be explained primarily by the extreme poverty conditions and the special socio-cultural characteristics of the Adivasis themselves. It is important to note, however, that AI's own organizational and staffing set-up and its strong preoccupation with agricultural technology *per se* may also be part of the explanation.

The development activities on which our assessment has focused appear to occupy something more than a purely peripheral role; and yet in terms of organizational (and probably financial) resources devoted to it, it suffers by comparison to other activities. It is noteworthy, for example, that the AI has only one Extension Officer

who looks after the work connected with development, and that there is no separate organizational unit headed by a competent middle-level officer responsible for planning, coordinating, and giving impetus to these development activities. The gap between the Principal of AI and the Extension Officer is a big one, and the Principal is, of course, a man of too broad responsibilities in various fields to give single-minded attention to development work.

The decision-making in AI seems excessively centralized, with large communication gaps between field workers and the higher authorities, and a lack of adequate procedures for discussion and proper devolution of authority. The Adivasi themselves evidently have little if any voice in the formulation of programs intended for their benefit.

AI's research is largely concentrated on agricultural technology for improving crops in the coastal areas. While this can be helpful to farmers, including Adivasi farmers, in these areas, the needs of those in other areas with different ecological conditions are less well served. Perhaps more significant, however, has been the lack of sufficient attention to the practical economic feasibility of the various new agricultural technologies and innovations recommended by AI from the vantage point of small farmers with only one to three acres and a limited water supply. There has been a similar neglect of research into the economic and social problems of the Adivasi that evidently constitute serious obstacles to the adoption of new agricultural and other technologies.

Like most other organizations active in agricultural and rural development, AI lacks systematic record-keeping on the impacts of its activities, or any system of continuous evaluation that could help improve the effectiveness of ongoing activities and identify promising new opportunities.

The AI's overall activities, including in some measure its development activities, are also handicapped by the fact that the tenure of a sizeable number of its staff--mainly those working in the Gram Sevak Training Centre and the Panchayati Raj Training Centre --hinges on the uncertain renewal of annual government grants. Such uncertainty and insecurity is bound to affect staff morale.

We have noted these managerial and staff problems not with any intent to criticize the AI but rather to underscore the kinds of practical handicaps and limitations that almost inevitably plague any voluntary organization endeavoring to improve the status of the rural poor.

PROGRAMS AND APPROACHES OF THE  
GRAM BAL SHIKSHA KENDRA (GBSK)

The present activities of Gram Bal Shiksha Kendra (GBSK) at Kosbad Hill and surrounding padas are both vigorous and varied. The programs for preschool children were originally intended to follow the Vikaswadi concept; that is, the three preschool activities were combined: a creche for children up to two and a half years, a Balwadi for children of from two and a half to six years and lower classes of the primary for children above six.<sup>1</sup> A happy innovation founded almost by chance is the night school that fills a need for children otherwise occupied by day. Teacher training is served by the establishment of the Rural Bal-Sevika Training Center and the Junior College of Education; hostels are particularly important for inservice teacher training. With the help of UNICEF two types of applied nutrition training are available. A workshop, publication center, and printing press contribute to the need for occupational training, and the Shabari Udyogalaya is a unit for the manufacture and sale of preschool teaching aids. Some of these activities are essentially educational; while others are not. Some are of significance from the point of view of the Adivasi neighborhood, while others are of a more general nature. A description of these activities follows, with emphasis on the problems encountered and the methods used in meeting them.

## PROGRAMS FOR PRESCHOOL CHILDREN

The creche and Balwadi start functioning at 8 a.m. and continue until 11:30 a.m. A mirror, combs, soap, and water are kept at the entrance of the Balwadi. The children are required to clean their teeth, wash their hands and feet, and comb their hair before entering. The main emphasis is on the development of the five senses. Individual and group activities are encouraged. All the aids used are made by the Shabari Udyogalaya mostly from material found locally. Thus, children are encouraged to join mud globules, or seeds with

---

<sup>1</sup>At present the children of this age group go directly to the full-fledged primary school, and thus the connection of the primary school with the Vikaswadi has been snapped.

holes perforated in them, into a string, to draw and paint, and to make balls or other toys of clay. Any child can visit the creche in the adjoining room and play with his younger sibling. A child too young for the creche is also allowed to sit with its elder sibling in the Balwadi. An informal homelike atmosphere is deliberately sought.

In the earlier period, the primary school was run during the same hours as the creche and Balwadi. It was a sort of nonformal primary school where children aged six or more who were assigned the duty of looking after their younger siblings were taught reading, writing, and simple arithmetic.

GBSK runs ten Balwadis in the nearby padas of Kainad and other villages. Most of them have creches attached, but children above six years now go to the primary school at Kosbad Hill and so no primary schools are run at these places. All these Balwadis are conducted by women who have been trained in the Bal-Sevika Vidyalaya at Kosbad Hill.

### PRIMARY SCHOOL

When Mrs. Tarabai Modak and her group started their work in Bordi, their objective was limited to preschool education. They never thought of opening and running a primary school. They thought that after leaving preprimary school, the children would naturally go to the primary school for education. However, when they saw the condition of the primary school at Kosbad, they realized that most of the tribal children never go to school. It was no use running preprimary schools if the children did not later go to primary schools. The problem of educating tribal children could be solved only if preprimary education and primary education were run simultaneously by GBSK. Therefore, GBSK took over the management of the primary school at Kosbad from the District Local Board in 1956. At that time, it was up to Standard IV. Students were extremely irregular and weak in their studies; the number of students on the roll was 47, with not a single girl student, but the average attendance was only 9.

Strenuous efforts were made to enroll students through house-to-house visits. In the beginning, the students were grouped together irrespective of the form to which they might belong, for their earlier training was so poor that dividing them made no sense. A new method on the pattern of Balwadi was adopted to teach them reading, writing, and arithmetic. Emphasis was laid on dramatization, action songs, and nursery rhymes. The teachers were asked to select lessons that were related to the life of the Adivasi students. This method had some effect in popularizing the school and also in encouraging a regularity of attendance.

Two difficulties were noticed in teaching these students. First, although they learned their lessons and arithmetical exercises with some eagerness, they could not remember what they had learned. (Most of these students were the first in their family to join the

school.) However, they had presence of mind, physical endurance, and agility, and it was decided to preserve these qualities of the children.

The second difficulty was that the tribal children were not accustomed to sit at one place and to pay concentrated attention to anything for even an hour or so.

To solve these problems several things were done. Children were allowed frequent intervals in which to play out of the class, with the teachers taking part. Frequent excursions to nearby hills and forests were arranged. Children were encouraged to collect different things they found in nature. These included beautiful red Gunj seeds, nests of birds, animal skulls and bones, and even dead snakes. These things were kept in a museum which in the course of time became the pride of the school. Certain dead animals were kept in formalin. Children were taught biology, physiology, and other subjects with the help of the objects they had collected themselves. Charts and pictures were prepared and hung in the museum. In this manner students lost the fear of school and developed the faculty of retention. There was a marked improvement in their memory, and the number of students on roll increased year by year. Although the majority were and are Adivasi, the number of non-Adivasi students also increased as the staff of the GBSK and the adjoining Krishi Shikshan Sanstha expanded. This mutual participation helped the Adivasi students to mix with non-Adivasi ones with ease and a sense of equality.

All these efforts had the desired result. The number of students rose from 47 in 1956-57 to 348 in 1977-78, of which 295 were tribal students. The number of girls rose from zero in 1956-57 to 103 in 1977-78.

#### NIGHT SCHOOL

On the 11th of July 1956, a boy of 14 years approached Anutai and asked to be taught at night since he had no time in the day. This incident led to the night school which started on the 12th with him and a friend. The number of students increased each night and within a week the group consisted of ten boys and three girls. The school started at 7:30 p.m. and was over by 10 p.m. every evening. However, most of the boys, particularly the ones coming from a considerable distance, slept on the school premises. Within a few days the number of girls went up to 20. Even some of the girls who attended day school came to the night classes, and most of them spent the night on the school premises.

Whatever changes had been made in the teaching content of the day school had to be made within the limits of the curriculum set by the government. However, the night school was free from these constraints. The living together of the students at night also helped to develop the nonformal character of the night school.

As soon as the night school started, the first program was one of story-telling. Students were also encouraged to tell stories they themselves knew. Then there were programs of singing and at times even group dancing. A group dance called tarpa dance is very popular among the Warlis, and every girl and boy can take part in it. The students, however, had a different idea of what a school should be, and began to demand the teaching of reading and writing. These subjects were introduced gradually. At first, only the words they knew were given for writing. They were also taught to write numbers. Unlike the primary school, the night school had no problem with irregular attendance. However, as in primary school, the students learned letters, words, and numbers quickly, but were quicker in forgetting them. It took a long time for them to remember what had been taught, but they finally succeeded because of their own enthusiasm and the untiring efforts of the teachers.

Excursions by these students were also arranged from time to time, and general knowledge imparted to them through stories, songs, and small dramatic pieces. There was no formal timetable nor any set time limit for the completion of any subject or lesson.

Now that Warli parents are ready to send their children to school despite the cost in loss of their earnings for the family, the night school is losing its importance. The activity still goes on, however, and young boys and girls who cannot attend the day school take advantage of night school.

At present (1978-79), there are 35 students in the night school at Kosbad. Of these, 17 are studying for the Standard IV examination. Most of them are above 14 years of age. Occasionally some of those who are not on the roll also attend the school. Most of the students' ambition is to pass the Standard VII examination, which is the final examination for the primary school.

Recently GBSK started operating one more night school at Dongaripada where GBSK wants to develop a new Vikaswadi complex. At this night school there are 42 students on the roll but average attendance is 25.

It should be noted that there are no fees charged in the night schools, and the teachers receive no remuneration for this additional work.

#### WORK EXPERIENCE

One of the prominent features of the primary school is the occupational training given under the program of work experience.

Work experience is a part of the school curriculum in the State of Maharashtra. Under this program, students of Standard V onwards are given training in some productive work. This program is intended to serve a dual purpose: give the students some sort of elementary vocational training so that at least some of them can pursue these vocations later on after obtaining further training and skill, and

secondly, teach the students respect for manual work. How far these purposes are served by the program in schools all over the State is debatable. However, GBSK primary school has taken this program seriously. Actually GBSK started its occupational training much earlier than the State work experience programs. At the beginning of their work at Kosbad, GBSK workers tried to persuade children to join the school, but soon they found that the majority of children age ten onwards and even less worked to earn some money. Children of school age used to graze cattle, work in the fields, collect firewood for their own use or for sale. They did not earn much, but whatever they earned was necessary for their families, and school work of any kind seemed to be out of the question.

One of the solutions was the meadow school (discussed later) but not all children went to look after cattle and so meadow school could not cater to their needs. In any case, it was decided that children should be provided some work for three to four hours, and taught the rest of the time.

In 1956-57, this project got its start by assigning the children to plucking chillis on the AI farm. The children would study for three hours in the morning, and the rest of the day they worked in the field. But since this work was seasonal, children also helped in constructing GBSK buildings and were paid wages for their work. GBSK also tried to give some children work on the GBSK farm. Since these activities could not absorb many children throughout the year, some children were given the task of collecting firewood from the nearby forests, but this too had to be given up.

GBSK then tried to teach making bottle covers from paddy straw in 1959. The work was easy and it was possible to give continuous employment to Warli children for four hours a day. GBSK secured orders for these covers from a chemical factory at Baroda. Children worked for four hours a day and studied for four hours in the school. The work continued until 1963 when it had to be stopped because of competition from the traders.

After that GBSK tried to train some boys in carpentry, a practical training that would provide work throughout the year and enable them to follow the occupation later. The government's Cottage Industry Department made arrangements for a two-years training course. A student trainee received Rs. 10 as a stipend. The scheme was modified to suit GBSK students by making the course for a full-time trainee one year in duration and the monthly stipend Rs. 20. The modification allowed the students at Kosbad to study in the school for four hours and get carpentry training for four hours. In 1961-62, 20 tribal boys joined the course, 13 of whom appeared for the course examination and passed. It was noticed, by the way, that tribal students had a better sense of color combination and did their work more skillfully than nontribal students elsewhere.

After the students completed their carpentry training, GBSK encouraged them to form a cooperative society which started in March,

1963. At first there were only hand lathes, but now with electrical lathes various wooden toys, teaching aids for Balwadis, and even some wooden furniture are made in this workshop.

At present GBSK operates a sort of "earn and learn" scheme under the program of "work experience." The basic objective is to reduce the rate of dropouts from Standard V onwards. The results of this experiment are encouraging, and the rate of dropouts has come down considerably in recent years. Students are paid for their work at 25 paise per hour and earn about Rs. 10 per month. Girls stitch garments and are paid similarly.

## TEACHER TRAINING

### *Rural Bal-Sevika Training Centre*

GBSK's attempts to start preschool teacher training date from the Forties and Fifties at Bordi. At Kosbad a course was started in 1958 under a grant from the Central Social Welfare Board which withdrew its support in 1960. Now under a grant from the Indian Council for Child Welfare GBSK has been running the Rural Bal-Sevika Training Centre since March 1964. The period of training is eleven months. Every year 50 women workers are admitted to training. Each worker is given a monthly stipend of Rs. 40. The expenditure on stipends and teachers' salaries is borne by the Indian Council for Child Welfare. The trainees are given training in preschool education and also in games and health care for children up to twelve years. The applications for training have to come through voluntary institutions, gram-panchayats, and other government or semi-government organizations, who have to guarantee that they will employ the trainee at least for three years after the completion of training. More than 600 women workers have so far been trained at the Kosbad Centre. It may be pointed out that all such training centers in other states are run in the capital cities of those states. The center at Kosbad is unique in that it is the only center run in a village.

### *Junior College of Education*

A training center for primary teachers began in 1957 at Kosbad. The objective was to train primary teachers to work better in rural and, in particular, in tribal areas.

Since 1964 GBSK has been conducting a special orientation and training program for teachers in the center. The object of this special program is to create motivation and ability to work in tribal areas. Under this program, special lectures are arranged on tribal culture and kindred subjects. The trainees are required to spend fifteen days in a tribal village and run a one-teacher school there. They also study the working of the Vikaswadi, meadow school, and night schools run by the GBSK.

In 1968 the primary and preprimary training courses were merged. In all there are 160 students in this college. There are

five junior colleges of education in Thana district, but only the college at Kosbad has a preprimary section.

### *Hostels*

GBSK has been running two hostels, one for boys and one for girls, since 1960. The need to run such hostels arose when GBSK started a teachers' training center at Kosbad in 1957. The training center needed a practising school; but because attendance at the primary school was poor and irregular, GBSK decided to run hostels for boys and girls to ensure attendance there.

For the first two years, the major problem was to get students for these hostels. A number of students left within a few days of joining. The problem was more acute in the case of girls. There were only four to five girls in the girls' hostel for the first two years. Later on, however, the number of students began to increase. In the current year (1978-79) there are 66 boys and 44 girls in these hostels. Of these about 50 percent are from the tribals and the rest are from the Scheduled Castes. The District Social Welfare Board gives a grant of Rs. 45 per boy and Rs. 50 per girl. The additional expenditure is borne by GBSK. Boys and girls are not charged a fee.

The hostel work is managed by students themselves. There is one cook in these hostels. In all other jobs such as cleaning and serving food groups of students take their turns.

### APPLIED NUTRITION TRAINING PROGRAM

Two types of applied nutrition training programs are arranged by the Gram Bal Shiksha Kendra with the help of UNICEF.

A seven-day training program is conducted at Kosbad from time to time. The prescribed syllabus for this course is meant mainly for women volunteers belonging to various women's clubs. The program consists of lectures on nutrition and about twenty practical lessons. The trainees also work in the kitchen garden. Trainees are given information on such subjects as the importance of nutrition, the concept of a balanced diet, proper methods of cooking care of children and pregnant women, and the importance of vegetables and other items in diet. Demonstration lectures are also arranged.

The second type of program is arranged in ten nearby villages with the cooperation of the local women's groups. Subjects are explained with the help of pictures and charts, and lectures are delivered in simple language. Practical lessons are also arranged in which women are encouraged to take an active part. The subjects covered include methods of proper cooking, importance of nutrition, child care, and general hygiene.

The major differences between the two types of courses are that the first is more intensive and given in seven consecutive days whereas the second is simple and arranged in periodic lectures and practical lessons.

Besides these two programs, the GBSK also holds a ten-day exhibition at a fair 18 miles away from Kosbad.

## OTHER ACTIVITIES

### *Publication Center*

The publication center has been running since 1952. Besides the collections of Warli stories and songs, the center has published useful books like *How to Run a Balwadi* and *Meadow School* (both in Marathi). One monthly called *Shikshan Patrika (Journal of Education)* is also published on behalf of the Nutan Bal Shikshan Sangh, the parent body.

Two of the books published by the GBSK in Marathi have been translated into English and published by the Government of India. They are: *Balwadi in Rural Area* and *The Meadow School* by Tarabai Modak.

### *Printing Press*

The press is mainly used for printing GBSK and NBSS publications. During the work at Kosbad, GBSK workers noticed that most of the boys and girls who left their education in the first four classes relapsed into illiteracy as they had no reading materials. It was felt necessary to publish books they could read with interest. The press is also used for this purpose.

### *Farm*

The farm land consists of thirteen acres of which seven are devoted to paddy and six are under orchard. There are 150 mango and 150 chikoo trees. The produce is used partly for consumption at the establishment and partly for sale.

### *Shabari Udyogalaya*

This activity has been started recently for the manufacture and sale of low-cost preschool teaching aids. The unit's production has been in good demand from all over Maharashtra.

### *Methods and Approaches*

In addition to considering what GBSK has done (or sought to do), it is important to review its methods and approaches that stand out markedly and should provide useful lessons to educational workers in other rural areas. A summary account covering the period since the Bordi days is presented below to show how GBSK's unorthodox, imaginative, and flexible approach went on responding in a creative manner to challenges of the local situation.

In Bordi one of the first problems that had to be contended with was that of casteism and untouchability. If Bhangi (scavenger) children came to the school, the other Harijan (untouchable) children would not come; the caste-Hindu children would not be permitted by their parents to mix with the Harijan children. At one time the attendance dropped down to zero. To get over this difficulty the "Anganwadi," frontyard school, was devised. The idea was that if the children did not come to the school, the school would go to them. Small kits of child education apparatus were prepared and the teachers carried them to different localities engaging the children in play. Gradually the caste problem was overcome, the message spread wider, and attendance at the central Balwadi increased.

When children from a long distance could not come to the central Balwadi, a bullock cart was employed to fetch them. These daily journeys to and fro took the form of processions with the beating of cymbals and singing of songs. This made schooling a more joyous experience for the children and increased the awareness of onlookers to what was going on. (This awareness is extremely important, for it must not be forgotten that even in Dadar, a suburb of Bombay, where Shishu Vihar was located, the educated middle-class parents hardly understood the significance of child education in those days. Conditions at Bordi were much worse. The traditional concept of learning was so rigidly fixed in the parents' minds that teaching without slate and pencil, without alphabet and numerals, was considered useless.)

Bordi, after all, was a middle-sized township, and the real Adivasi localities existed on the fringe. In one such area GBSK started a Balwadi for children of the Dulba Adivasi tribe. It was impossible to get hold of exclusively preschool age children here because they were accompanied by their younger and older siblings, since the parents had left the house for work early in the morning and the primary school age children were delegated to look after the younger children. The situation raised a challenge and afforded an opportunity. The answer was "Vikaswadi," alluded to above: a creche for very small babies, a Balwadi for preschool age children, and a primary school for the older ones. The annexing of a creche to the Balwadi was the critical innovation. Because of this arrangement the child could attend the Balwadi and at the same time be near the younger brothers and sisters. This arrangement also satisfied the parents, who would never have trusted their children to independent creches.

In the initial years of the Vikaswadi experiment, mothers used to visit creches to satisfy themselves that their children were not neglected. Never prevented from visiting creches, they were, in fact, encouraged to do so. On festival or other important days mothers were especially invited to Vikaswadi and encouraged to watch the work. The practice of allowing the elder child to visit its younger sibling whenever it liked gave it an opportunity to learn something about child care. This was particularly true in the case of the girls. Adivasi women also unconsciously learned lessons in child care and began to place greater trust in the persons looking after Vikaswadi. This arrangement also led to an improvement in the health of the infants brought to creches. Teachers gave them milk or other nourishing food and administered medicines for simple ailments. Children were kept cleaner than they were in their own homes. The children also heard and saw more things than they would have at home or outside the Vikaswadi. The Vikaswadi thrived later in Kosbad.

The most important aspect of child education in poor countries is the costs that must be sustained. Tarabai and Anutai bent their energies to tackling this problem out of necessity as well as an ideal (in 1945 Anutai's monthly budget for Dubla children's Balwadi was Rs. 3!). Here, too, necessity turned into opportunity.

Tarabai has described the stratagems that GBSK used:

...we prepared beautiful works of art from the surrounding trees, leaves, flowers, fruits of the *suru* tree and conchshells and *gunja* seeds.... We found the local potter's method of preparing lumps of mud very novel and we introduced it into our Balwadis. In backward areas people paint pictures on the dung-smearred walls of their huts on occasions like marriage; modelling on this we made small rectangular boards of strips of wood, smearred them with the dung mixture and encouraged children to paint on them with coloured wet mud sticks. Pen and paper being costly we used the ground, the walls, the doors, earthen pots, pans, etc. as bases and prepared variegated colours by mixing *geru* (a red material), lime, yellow earth, etc. Brushes were made by crushing the ends of tender sticks of a *wud* (bunyan) tree.<sup>1</sup>

In a summary form this passage brings out most of the advantages of the new educational aids. They were cheap; they came from familiar surroundings and prevented alienation; they induced inventiveness and explorative ability among children as well as teachers. In certain cases they also helped village craftsmen

---

<sup>1</sup>Tarabai Modak, *Vees Varshanchi Vatchal* (Marathi; Review of *Twenty Years' Work*); GBSK, Prakashan, Kosbad Hill, 1965, pp. 5-6.

in accordance with Gandhiji's advice to Tarabai in 1949. This practice increased many times in later years at Kosbad, and GBSK now manufactures a number of simple teaching aids for supply to other institutions through its Shabari Udyogalaya.

The Adivasis' abject poverty and hunger turned Tarabai's thoughts to ways and means by which the hunger of those children who could not attend school and went in search of things like jungle roots could be quenched. With the aid of the children a small garden plot was cultivated near the the Dubla Balwadi. Tarabai realized that the economic problem was the basic obstacle to any kind of education in the poor communities and this problem remained an obsession with her. One of the things she tried later at Kosbad was the making of bottle covers out of paddy straw which enabled the children to work for a few hours to earn some money and learn during the rest of the time. This activity did not last, however, because the grass traders in the surrounding area found it to be a very profitable proposition. Even today child labor is largely used for such work. This was one of the problems the GBSK could not satisfactorily solve.

Whatever success child education has achieved in this area would have been difficult to achieve without the genuine affection for the down-trodden community and its children, and without a tremendous faith in the work at hand. The difficulties in an area of abysmal poverty and ignorance were such as would have broken anyone's heart. Here Anutai gave of herself in abundant measure. Cleaning girls' hair of lice and applying oil to them, scrubbing the children of dirt and bathing them (sometimes with hot water), applying anti-scabies ointment, looking after and treating sores of malaria-affected children when their parents were away--these were by far the most effective measures of all, and they endeared GBSK to its young clients.

After shifting to Kosbad, another innovation in education was introduced. This was the "meadow school" (*Kuranshala*), conducted for about six months of the year. A number of Adivasi boys and girls above the age of eight were assigned the task of looking after cattle and grazing them in the open fields and pastures. The task was particularly arduous in the rainy season when paddy crops were standing in the fields, and cattle entered these fields unless they were watched carefully. However, in other seasons children were comparatively free after the cattle were taken to open lands. Because it was not possible for these children to attend school, most of them remained uneducated. GBSK hit upon the novel idea of educating them by sending a teacher with them to the meadows and engaging them there in programs that included songs, games of different kinds, and story-telling. There was no classroom, no ringing of bells, no slates or books. Different subjects, such as, elementary arithmetic, geography, language, and hygiene were introduced with the help of natural objects such as flowers, sticks, insects, birds, and stones. This was spontaneous "nonformal" education about which a few words are in order.

In the beginning Anutai and the headmaster of the primary school went to a meadow and began taking part in the games played by the children assembled there. This joint participation went on for some days, and gradually the children began to treat them as friends. It was then decided to introduce language development and concepts of measurement (height, length, weight and time), without in any way imposing anything on them or detracting from their natural enjoyment of the games. The teachers also insinuated group programs of cleanliness into the games.

To give them an idea of the passage of time a peg was fixed in the ground to mark off the tip of the shadow of a tree when they began their activities. After every hour another peg was fixed, and the last peg was fixed at 11 a.m. when the activities were over. Within a few days the children learned to measure time with the help of measured shadows. Then they were shown a watch and with its help were taught to read time.

Similarly, concepts of weeks, months, years, length, breadth, and weight were gradually introduced with the strategic use of various objects such as stones and sticks and other ordinary objects.

Observation of insects, birds, reptiles, cattle, and trees was also encouraged. Occasionally, the children were taken to the museum at the primary school at Kosbad. This museum was mainly stocked with objects collected by Warli children. It consisted of different types of stones, dried leaves, branches clay models, dead snakes kept in formalin, and pictures of different birds.

Children were sometimes brought to the regular primary school for visits, and occasionally meadow school children were taught to read and write well enough to join the regular primary school.

There are no meadow schools now: the night school has partly met the educational needs of older boys and girls; moreover, large tracts of land have been bought by plantation owners and the grazing grounds have receded much farther.

## CHAPTER 6

### RESULTS OF THE GBSK PROGRAMS

GBSK's activities, like those of the AI, are of two types: those concerned with the neighborhood and those concerned with outside areas. Inasmuch as visits were necessarily selective, it was impossible to do justice to the latter. Observations of the training programs have also been limited, and therefore the focus here is on the Balwadis (including the central Kosbad Balwadi) and their attached creches, the primary school, and the night school. All of these were visited at least once, interviews were conducted with teachers, workers, and a few boys and girls (past students), and these discussions and impressions were fortified by frequent and extensive talks with Anutai Wagh and her associates. What follows is first a quantitative summary of educational growth and then an impressionistic account of qualitative change based on these visits and meetings.

#### A QUANTITATIVE REVIEW

The record of GBSK's preschool and school activities is as follows:

In the nine Balwadis started up to 1976, a total of 335 children were on the roll in January 1978. Of these 163 were boys and 172 girls. Of the 335 children only ten were non-Adivasi. If we add about 60 belonging to the two new Balwadis the total strength would come to about 400.

In the three creches run by GBSK there were 87 children in January 1978. Of these 51 were boys, 36 were girls. All except five were Adivasis.

In the primary school at Kosbad there were 348 students in January 1978. Of these 245 were boys and 193 girls. Adivasi boys and girls accounted for 295 of the total 348 students.

In the boys' hostel there were 66 children in January 1978, all of whom were students of the primary school. In the girls' hostel there were four, all of them students of the primary school.

Thus in so far as children's education is concerned, the total strength of students (including those belonging to crèches, Balwadis and primary school) in Kosbad and 10 surrounding padas in January 1978 was about 835. Of these 767 were Adivasi. Adding about 25 enrolled in the night school we have somewhat less than 800. This, in substance is a quantitative expression of GBSK's efforts in a place where next to nothing existed twenty years ago.

About 1960, when GBSK had only recently started its work, the educational situation in the seven padas around Kosbad was that seven children were in the creche, six in the Balwadi and 13 in the primary school. This was before the Balwadis and creches in the padas were started and only the central Balwadi, creche and primary school in Kosbad existed. It is against this background that GBSK's success has to be measured. This success is largely due to GBSK's expansion in surrounding padas.

According to a recent survey of 28 villages in the Kosbad region, male literacy is 33 percent. Twenty percent had been to primary school, 11 percent to secondary school and two percent were graduates. Most of these villages are outside the GBSK's (and AI's) sphere of influence. This indicates that in the villages under the direct influence of GBSK (and AI) the percentage of literacy--which has not been taken--must be far greater. This educational change is the combined result of GBSK and AI educational activities; for it must not be forgotten that AI also has its Ashram Shalas, a secondary school, and a Balwadi.

GBSK's two training schools had 219 trainees in 1978, 166 of them women. Since most of them come from outside areas, we have not included them in measuring the educational progress in and around Kosbad.

A record of the work experience program of the primary school and its effects is very revealing. Before it was started in 1975, the proportion of dropouts after the Standard IV was heavy. The work experience program therefore starts from Standard V, and carpentry, farming and stitching (for girls) have been included. In 1975 the program was introduced to Standard V, in 1976 it was extended to Standard VI, and in 1977 to Standard VII. (By this time two groups having completed the full program have passed out of the school.) The dropouts' proportion has, almost by a miracle, dropped down to zero! All the students have joined the AI's secondary school, and special benefit has accrued to the girls, who in general are denied education at all levels more than boys. At the same time as an indication of GBSK's valuable innovation the results of the program also bring out sharply the importance of the economic factor in Adivasi (and poor people's) education.

#### OBSERVATIONS AND IMPRESSIONS

Turning to qualitative aspects of the results of Adivasi education the following observations seem to be in order:

The primary school now admits children who have had Balwadi training and those who have not. Those who have had the advantage of preschool education are generally more alert and smarter, and they fare better in their examinations.

The GBSK has succeeded substantially in breaking the resistance of children as well as of parents to this early education. Mr. Vasant Patil, the headmaster of the primary school, who has been in Kosbad for twenty years, has said that in the early years children had to be coaxed into attending the school; as soon as they were in, many of them used to jump out of the windows. Now the school-going habit has been formed. Parents who earlier needed a great deal of persuasion now come on their own to enroll their children. For Balwadis the teachers had to go round collecting the children and clean them; even today some children have to be fetched from some houses because their parents are away at work, but the teachers now say that most are kept ready and clean. Gradually education is taking root. In a *Haldi-kunku* celebration on the Kosbad pada two Warli women were heard making short speeches about how important education is!

A further instance of the spread of the educational message was the request which Anutai Wagh received from two padas (Ghatalpada and Dhakpada) asking her to start Balwadis for each of them on the Padva (Hindu New Year) day. At the opening ceremonies not less than 60 percent of the children were spotted as suffering from scabies; but five months later, at least at Ghatalpada, the scabies affliction seemed much less and the children more cheerful--thanks to Balsevika's efforts.

A process once started achieves momentum. For example, consider how two brothers belonging to the pada, themselves products of GBSK, one of whom is now a holder of a Diploma in Education and a teacher, took the initiative in starting the Dkhakpada Balwadi in their pada. Another example is the experience of the entire Vadhan family. Two sisters, Taya and Sundar, were early entrants in the central Balwadi. They did their primary school and received Balsevika training. Both are now Balwadi teachers. Their younger brother, Radkya, underwent the same process up to primary school and followed with an eleventh-month agricultural course at the AI's Tribal Youth Training Center.<sup>1</sup> Radkya was followed by a brother and sister through Balwadi and primary school. One revolution of the educational wheel in the Vadhan family has now been completed and another has begun: Radkya's own small daughter, Saroj, has recently been admitted to the Kosbad creche. It seems reasonable to conclude that educational influences, once they enter the family, become self-sustaining.

Six of those who have gone through GBSK's Balwadis or primary school are now trained teachers. Three girls are working in

---

<sup>1</sup>Radkya was included among the eight best farmers described in Chapter 4.

the press in the composing department. One student who attended GBSK's night school, now the Chairman of the Panchayat Samiti (tahsil-level) council, helped importantly in setting up the Dongarpada Balwadi

Interviews with six Balwadi old boys and girls and others are revealing about the education of Warlis. Less addicted to drink, they have not renounced drinking. Many still believe in ghosts and their evil powers. It would appear that the girls are probably more promising material than their male counterparts. In the night school of both the AI and the GBSK, their attendance is better. Their desire to learn appears to be keener, their readiness to talk, surprisingly greater. Girls particularly dislike their parents' heavy addiction to drink. Some girls have given up the Warli type of sari-wearing and have taken to the modern Maharashtrian fashion, an innovation that is disliked by their parents and pada-dwellers. There was one instance in which a school girl strongly urged that her sick younger sister be taken to the doctor when her parents insisted on taking her to the Bhagat (witch doctor). In this particular conflict between the generations it happened that the ailing girl succumbed to her disease, and this turn of events confirmed the older sister in her modernist conviction. It is apparent that education has caused the girls to have more exalted expectations about their prospective husbands; it is not always easy for them to find suitable matches.

In general, even the educated Warlis lack self-assurance. Although exceptions may be found, they are generally laconic and diffident. Education, it seems, has not as yet been able to wipe out this tribal characteristic. For example, an intelligent Warli boy who secured very high marks in his papers was introduced by his secondary school teacher who complained that he hardly ever answered any question put to him in the class. Another top-ranking student of the Waki Ashram Shala was evidently very nervous and shied away from the congratulations of visitors who tried to engage him in conversation.

The reasons for this diffidence probably lie in the deep-rooted fear complex mentioned earlier. At least one reason is the feeling of inferiority the Warli children display when they are identified as such and shown to guests. Such consternation is probably unavoidable when inquiries are made as to who is Warli, who is Kokna, and who is Bhil.

This lack of self-confidence undoubtedly accounts for the fact that, except in a couple of cases, no local Warli leadership has come from those attending the two Institutes. One exception is an MLA who attended the AI; the other is the Chairman of the Block Council who went through the GBSK night school. This leadership, again, appears to be conventional, although there are few data on which to base this observation. One reason may be the cultural isolation from which the educated Warli seems to suffer. Another may be the almost total lack of "conscientization" in the educational content of the Institutes. A third may be the absence of deliberate

efforts to create in the minds of Warli students a respect for some of the desirable features of their own traditional culture.

One serious handicap under which GBSK has been working must be mentioned. After Balwadi, where GBSK has freedom to design the content and methods of its educational programs, the children join the formal stream which is standardized for the entire State. Courses of study, their sequence, contents, textbooks, examinations, are all developed in line with government policy, in which the special needs of Adivasi students are hardly likely to find a place. There is no doubt that, if the GBSK had the freedom to suit the education to the needs of the locale, the children would be far better served.

### *Management Aspects*

Although no formal procedures are laid down, the atmosphere within GBSK is friendly and conducive to free interaction among various categories of workers.

What is lacking is a systematic attempt at self-evaluation. Records of various types do exist, but a purposive documentation and data-collection with a view to assessment, identification of problems, scope for improvement and expansion, etc., are essential. Similarly a follow-up of the careers of old boys and girls would be very useful.

A perpetual problem facing the GBSK is that of finances. Most of the Balwadis and creches are aided either by government organizations or by private agencies (including some foreign ones such as the CAA), but deficits, nonetheless, are burdensome; and in order to make them up, GBSK has to contact donors, stage shows, and publish souvenirs. Under government budget expenses of only Rs. .20 (20 paise) per child per day are allowed for children's snacks in an area where hunger and malnutrition are rampant. These children must first be fed and fed well. Anutai, who will be seventy years old in March 1970, and her colleagues have to do a great deal of running about to collect funds to keep GBSK going in a reasonably effective manner.

In the context of the principal objective of GBSK, three observations occur to the observer.

First, although eleven Balwadis have been activated in Kosbad and its environs in the past twenty years, nothing by way of Balwadi expansion took place in the eleven years from 1961 to 1972 and again from 1972 to 1976.

Second, creches do not exist at all Balwadis. In fact, there are only three creches, attached to Kosbad (central) Balwadi, Dangaripada Balwadi, and Dalvipada Balwadi. The question is raised why they are not attached to the eight other Balwadis.

Third, what has happened to the Vikaswadi concept? Except at Kosbad, it has disappeared, and even in Kosbad it exists in an attenuated form. Kosbad retains the three components, but the primary school is such a big and formal institution housed in a separate building, it is difficult to conceive that an organic relationship--as visualized by the pioneers--remains alive among the components. In practice, the Vikaswadi concept seems to have receded into the background, a retreat that, on the face of it, seems unfortunate, considering the vital role it was supposed to play.

No doubt shortage of funds and the pressure of other activities are responsible for these phenomena, and yet they call for a reexamination of GBSK's direction and growth.

## A COMMENTARY ON SOME KEY ISSUES

Having surveyed the evolution, activities, and impact of the Kosbad Institutes, we turn now to some critical reflections on the key issues posed to us by the ICED, namely: (1) how well the various program components of these institutes are integrated; (2) the extent to which there is direct community participation in planning and running these activities; (3) the adequacy of the educational inputs; (4) what success the programs have had in actually reaching and involving the poorest families; and (5) the special roles that voluntary organizations can play in rural development.

## THE AGRICULTURAL INSTITUTE

*Integration*

The multifarious activities in which the AI engages itself immediately raise the question of their relationship with one another.

The AI's origin at Kosbad was in the form of an agricultural school as part of a government program to establish one such school in each district. The AI, naturally, in this capacity, was assigned the work of training agricultural workers for the Thana district. Thus Thana district agriculture should be the main concern of the AI. That this has been so is reflected broadly in the research programs launched. The agricultural potential of the district--paddy, horticulture, vegetables and grasses--has been what the AI has been mainly trying to develop, and at least technically many of its innovations can be considered successful.

Since the utility of the new methods and practices had to be tested in the field, the training of the trainees of the Agricultural School would have remained incomplete if they had not become acquainted with the field problems. It was, therefore, natural for the AI to directly involve the trainees in the agricultural development of surrounding villages. Thus the development program to which we have paid particular attention has a strong link with the basic, or at least original, objective of the AI. The same, of course, may be said of supply and extension. Because AI needs to know the effectiveness of its research at the field level, it is clear that the main core of its research, its Agricultural School, which

exclusively admits students from Thana district, and its extension and development programs make up a consistent whole.

This cannot be said, however, about the other training programs. Through one training center or another the AI has to look after the agricultural needs of a total of five districts, a responsibility that has affected the research program to some extent. For example, experiments on cotton were primarily impelled through the necessity of training Jalgaon district trainees of the Adivasi Janata Vidyalaya and the VLW Training Center. It is also obvious that the training of non-Thana, or at least non-coastal district, trainees would be inadequate. Jayant Patil has said that he appealed to the government for the removal of the Jalgaon district from his list of clients, but to no avail. Being an institute of high repute has its cost; there are always pressures from the government to do this or that, even though it may not fit into a coherent pattern.

Located in a tribal area the AI naturally concerned itself with the problems of the tribals. There were also early stimuli of the founders, especially those of Bhise, which prompted the AI to make the downtrodden and poor Adivasis one of its principal concerns. Technical problems of coastal or Thana district agriculture do not differ from those of the agriculture of the tribals in this district; so whatever was useful to Thana district could also be expected to be useful to the tribals within the district. But dealing with one set of tribals is different from dealing with another. Their problems would be common on a sociological and cultural plane, but not necessarily on the agricultural plane. Bringing together Adivasi youth from five different districts and several different ecological zones under the Adivasi Janata Vidyalaya does not seem to result in substantial benefit for tribal agriculture as such. Thus the drive towards Adivasis *per se* for their agricultural improvement seems to lack focus.

Examination of the integration issue has two sides: first, to see whether the existing activities are purposively linked with one another; second, to point to other activities which should logically form part of the total design but are missing. It is to these latter that we now turn our attention.

On the technological plane one of the objectives of the AI has been to offer to the small farmers not cultivating more than three acres per family--and most Adivasis belong to this category--a technology that would lift them out of their dire poverty. The pivotal point here was to turn a largely one-season (kharif) agriculture into a year-round enterprise. To accomplish this a constant source of irrigation is needed. The surface well, one of the earliest innovations of the AI, does not seem to have made much headway. The AI itself seems to have gradually turned to dug wells. Of course, the surface well could serve only as a source of protective irrigation in dry seasons and could not support a three-crop cycle. Furthermore, the dimensions of the surface well occupy a substantial area of a farm that is already small. However, perhaps larger farms could benefit from such wells--a possibility that would seem to warrant closer examination.

A further reason for reexamining the potential of surface wells is because the areas dealt with are heavy rainfall but low ground water areas. The nature of the terrain suggests that it would be a great advantage to catch the abundant rain water that otherwise runs down the hills as soon as it falls and leaves the areas totally dry after about four months of heavy showers. Unless appropriate measures are taken the problem of ground water scarcity is going to become steadily more severe.

If rain water or ground water supplies have a limit, then it obviously becomes important also to improve water-utilization techniques in order to insure the most economical use of the available supply. Although we speak as laymen in these matters, this much seems clear: apart from the surface well, developed in 1969, the AI does not seem to have given sufficient attention to irrigation research. If indeed water is the key bottleneck, then it would appear to warrant a high priority in AI's research program.

However, technology alone is not enough when dealing with the Adivasis, or with small subsistence farmers generally. A new technology may look attractive from the limited perspective of an agricultural production expert, but it is important also to examine its attractiveness and feasibility from the broader and quite different perspective of the small farmer. The strongest impression we formed was that the AI has not appreciated the necessity of social science research. For any backward areas, and especially the tribal areas, agricultural problems are deeply embedded in socioeconomic problems and constraints. What will finally click with small farmers or Adivasis depends very much on their social and economic environment and how they perceive their needs, risks, opportunities and alternatives.

Beginning with the economic aspect, we would, for instance, like to know the economic alternatives to paddy cultivation as viewed by the small farmers, which might help explain their meager adoption of the HYVs. If it is true, as reports suggest, that the plantations in the areas around Kosbad afford wage employment at Rs. 5 or 6 a day, then many small farmers may quite rationally find the attraction of wage employment irresistible, purely on the grounds of the relative gains and risks of self-cultivation *versus* wage employment. It is no use simply calculating that HYVs and multiple cropping on a three-acre plot would (under favorable weather and market conditions) give a net income of Rs. 4000; it must also be found out whether wage employment gives as much or more than that without the advance investment, risks and uncertainties involved or the delayed income. Account must also be taken of the fact that the average Adivasi family apparently has substantially less than three acres of good land and poor water conditions for much of the year.

A related question is whether the Adivasis' own land can, by stages if necessary, be converted into mango or chikoo orchards so that he will make even a larger income than what wage-employment yields him, or be in a position to combine wage employment with self-employment in his orchard. This is only an illustration. The main point is that the economic alternatives and risks--seen from the

farmer's vantage point--seems lacking in AI's research.

Although wage employment apparently offers a strong competition to self-cultivation in the Kosbad area, it may not constitute the whole explanation of the general Adivasi behavior, because in other areas where competitive income-earning opportunities are not available the Adivasis still resist agricultural innovations. Here again their reasons may in part be rational economic ones, but it would also be desirable to identify non-economic factors that may inhibit modernization.

Once it is understood that Adivasi perceptions and attitudes are basic in any attempt at modernization, AI's educational activities take on a new importance. Although the Ashram-Shalas and the secondary school may seem unrelated to AI's main purpose, they really are not. Our earlier discussion has shown the importance of the educational inputs, especially at the lower age groups. The supplementary occupation programs also seem to fall into place; here again the needs of the trainees cannot be forgotten. In order to learn, many must also earn.

A more critical view needs to be taken of the "better living" program that reflects the "all-sided approach," so popular in rural development efforts in India. This non-integrated approach is little more than a string of loosely-woven programs that find accommodation because in one way or another they "sound good." Undoubtedly AI's attempts to improve family living (smokeless chulhas, glass panels, improved sanitary arrangements) are good in themselves, but if a more rational pattern of living is to be propagated, are these the best items with which to begin?

We suspect that AI could more effectively accomplish its goal of better living if its agricultural and other efforts were accompanied by a medical-cum-family planning service, the absence of which has been a serious lacuna in its totality of effort. Whether run by AI or some companion organization, a low-cost paramedic service with a competent referral system would have many advantages. In the first place acceptability would be greater because the Adivasi, at least in this area, is gradually turning away from the Bhagat. Save described today's Warli attitude as a sort of flitting from the qualified medico to the witch doctors, depending on who delivers the goods, and our own inquiries confirm Save's findings. Secondly, experience elsewhere has shown that AI could undoubtedly establish greater rapport with its clientele through the medium of health services. Finally, such services are a crying need of the area. For example, scabies and other ailments arising from unhygienic conditions and under-nutrition are prevalent; tuberculosis and leprosy are said to be on the increase.

In fact, bad health and low agricultural productivity are undoubtedly closely related to each other in the Adivasi area. For example, at the beginning of the sowing season three health problems converge: food stocks having been exhausted, hence the nutrition level is shockingly low; bad weather and bad water at the onset of the monsoons cause malaria, influenza, and dysentery; and the pressure

of work is abnormally high. It is painfully apparent that physical efficiency is at a very low ebb at a critical time of agricultural operations.

### *Community Involvement*

The members of the Adivasi community, so withdrawn, so unready to be helped, so modest in their aspirations, have shown little impulse toward community cooperative action and self-help. Or, to put the matter differently, the AI has not yet discovered the means by which indifference can be overcome, and it has therefore persisted in a paternalistic approach to which no reasonable alternative has suggested itself. Earlier Symington reflecting a similar paternalistic view, had written that socially and politically the Adivasis were centuries behind even the intermediate castes of the presidency, and what they needed most was strong government action both to prevent them from exploitation and to supply them as fully as possible with their educational, social, and economic needs. To bring one generation gradually to the general level of their neighbors, he argued, would be enough to accomplish.

However, on an individual plane as distinct from a community plane the AI has tried with some success to encourage and assimilate within itself individual Adivasis, mostly students. It has been helping deserving secondary school students enter the University. About 12 of its old boys have become agricultural graduates and one has become a veterinary graduate. Twenty-five girls from the high school have passed the D.Ed. examination. One Adivasi student has gone in for the medical course. More important, all four instructors in the Agricultural School are AI's products and Adivasis. These successes suggest that if individuals can, through education, be liberated from the bondage of poverty and inhibiting cultural constraints, then perhaps there is hope that whole communities of tribal people can be similarly liberated.

### *Education*

In spite of AI's solicitude for the Adivasis' needs in its many formal and nonformal educational programs, it seems not to have appreciated sufficiently that their basic agricultural problem is rooted in exploitation. Possibly exploitation, in its grosser forms, no longer exists in Kosbad, but others coming to Ashram Shulas and the young men from the Bhil, Kokna, Koli Mahadeo, and other tribes in the Adivasi Janata Vidyalaya have revealed their consciousness of their surroundings. They are ready for subjects wider in scope than the technical agricultural ones, and this could be consciously attempted, even in programs supported by government funds. Of the 160 or so who come and stay together for a year, at least a few could go back and spread the message of enlightenment and socio-political consciousness in their respective areas.

### *Reaching the Poorest*

In research, development, and nonformal education, the emphasis of AI activities has been on the poor--since all Adivasis are poor. In formal educational and training activities the emphasis on the poor has been only partial.

Our assessment of the development program (see Chapter 4) has revealed two broad conclusions: (1) the AI has not been able as yet to offer a technology and related services that would make the small farmer's holding viable, and (2) even a beneficial technique may not find acceptance for socio-cultural reasons.

The first of these conclusions (as we have noted) is dramatized by the fact that the well, in the absence of heavy subsidies, is not an economic proposition to a farmer holding less than five or six acres of good soil. Although a few smaller farmers may be said to have crossed the poverty line, this has become possible only because the wells have not cost them anything by way of capital outlay. The situation seems to be different for grasses and fruit trees, because techniques are extremely low-cost. There has been some difficulty getting small farmers to adopt them, but there is now encouraging movement and they offer promise which may be further explored.

The second conclusion means that, even where a technique makes sense in economic terms, it may meet with resistance in irrational behavioral terms. In short, the problem of reaching the poor in this area is compounded by two things: smallness and Adivasi-ness. The latter is probably removable through deliberate efforts to change attitudes and behavior patterns, especially through formal and non-formal education, but the process is slow with only limited prospect of immediate returns.

In the debate about poverty and its eradication in India one (and perhaps a growing) school believes that the conventional methods of helping the small man, like redistribution of land, tenancy reform, subsidized credit, extension of cooperation to marketing and agricultural production, small industry, etc., do not really fill the bill. Most of these have been tried, but they have had little impact--and not always because of insincerity or inefficiency in implementation. Generally many of these programs involve subsidies that result in perpetuating unproductive techniques. Since large, technologically sophisticated industry has a limited capacity to absorb the unemployed and underemployed labor, they see the solution in non-farm and non-industrial employment, *i.e.*, in rural construction works of labor-intensive kind, preferably with a guarantee of secure employment. The Government of Maharashtra has had an Employment Guarantee Scheme functioning for the last four years; but experience suggests that non-official agencies are necessary to push the program forward from the workers' end, and here is a new and probably more effective outlet for the work of voluntary organizations. But it involves work of a kind to which the AI's objectives, traditions, and methods seem hardly suited.

Thus, although the AI has a pronounced thrust in the direction of the poor, most of its innovations seem to benefit mainly the larger and non-Adivasi farmers.

An independent corroboration of the poor Adivasis' dilemma was obtained in discussion with the trainees of the VLW Center, many of whom, especially those working in the Adivasi tracts, openly said that it was futile to work for them and that attention should be directed to those who are capable of utilizing new techniques either because of resources or of favorable attitudes.

Around Kosbad employment is available, as we have seen, largely because of the fruit plantations. If these could be further expanded, the land would obviously be put to more productive use and income levels would generally rise. In the accomplishment of this three alternatives are open: (1) allowing private land owners freedom to expand; (2) starting larger-scale fruit gardening under government aegis; and (3) organizing small farmers into joint farming societies so that technical hindrances to better land utilization can be removed. Each one of these alternatives has its problems, and a choice among them would have to be carefully made. These, of course, are matters of State policy and mostly fall outside the purview of voluntary agencies and of this case study.

There is, of course, one other option: namely, to leave out of the agricultural development effort the smallest farmers who really cannot be effectively helped because of their small resource base. This would amount to a deliberate decision to exclude the poorest, although the more potentially viable ones among the poor could still continue to be served. This, however, is essentially what is really happening now, though not by conscious design.

A further serious obstacle to involving the poor in development activities is, of course, the drinking problem. The AI seems to have taken it more or less as a fact of life and done little except to address moral invocations. Granted there are no easy solutions, a deeper look into this troublesome problem is needed in order to understand its root causes and to experiment with possible cures. An exchange of experiences and a joint research effort between AI and other organizations facing the same problem elsewhere in India might be rewarding.

### *Voluntary Organization*

As a voluntary organization, AI is the fortunate beneficiary of strong dedication on the part of its workers. Whereas governmental programs have often been administered by personnel lacking the right motivation (especially true in the Adivasi area), the problems of the Adivasis are so complex that unless a large voluntary effort goes into their solution, purely governmental measures will otherwise come to nothing.

In similar vein, the number and variety of activities of AI is testimony to the innovativeness of voluntary personnel. The extent to which research and development have been carried bears witness to deeply motivated voluntary effort.

Be it remembered, however, that many of AI's activities depend on grants from the government, from whom cooperation and help would be necessary under any circumstances. This peculiar position has its advantages; at the same time it has the disadvantage that many times the AI's choices suffer restriction, not the least in the training programs. Contrasted with training, the AI's research is entirely unsupported by government and we find this reflected in the greater freedom and flexibility with which research is carried on.

The intermediate status of the AI--as a voluntary agency which in some of its activities is supported by government--also seems to result in adopting programs of a "safe" type that minimize the risk of stirring up political criticism and controversy.

### GRAM BAL SHIKSHA KENDRA

#### *Integration*

In comparison with AI's activities the growth of GBSK activities appears more organic and cohesive, and is much more concentrated on the needs of the Adivasi. Its prime purpose was, and is, preschool education; but after starting the Balwadi it necessarily had to turn to the training of preschool teachers to make the movement self-sustaining. In order to prevent Balwadi-educated children from relapsing into illiteracy and backwardness, it had to take over and reorganize the primary school. In order to insure regular attendance at the primary school the hostels were established. And in recognition of the fact that the economic problem is a major obstacle to spreading education and also that education in rural areas should not be divorced from work experience, the farm and the workshop were given an important place in the total program.

Given the fact that the Nutan Bal Shikshan Sangh, GBSK's parent body, was the pioneer in preschool education in Western India, and that Tarabai Modak was its main pillar after Gijubhai's death in 1939, GBSK's broader involvement in pre-child education, beyond the Adviasi and the Kosbad area is understandable. This accounts for the Publication Center, the editing and publishing of the Shikshan Patrika and other literature, the printing press, and the Shabari Udyogalaya. But the GBSK even here has taken care to integrate these activities purposively with the rest of its programs, for instance by involving Adivasi boys and girls in their operation. The night school might seem somewhat unrelated to the main core, but it arose, after all, in response to the demand of local boys and girls.

The UNICEF-supported applied nutrition training program, to the extent that it concerns pregnant women and young children, also

fits into the general scheme, but in a slightly more remote fashion. A new activity that the GBSK is contemplating is participation in the massive Adult Education Program that the Government of India has launched. Apart from the doubtful merits of the scheme (in our view), GBSK's involvement in it would seem to be unrelated to its main function and hence could become a counter-productive diversion. We cannot suppress the feeling that as between further expansion of Balwadis and creches (or tribal Vikaswadi complexes) and the education of adults, the former should have greater priority. In terms of tradition, equipment, and human resources, the GBSK's most effective work lies in child education, in which the opportunities for rewarding service are virtually unlimited.

### *Community Involvement*

What has been said above about community involvement in the context of AI is applicable here. GBSK appears to have had little success in stimulating active community participation and direct involvement in the operation of its activities, but not for lack of trying.

Parental involvement has not only been invited but deliberately encouraged at the creches and Balwadis. GBSK has sought to use the Applied Nutrition Program to bring the Adivasi women closer to its operation. Haldi-Kunku celebrations of women on surrounding padas are one more device to befriend the women and spread the message of the GBSK. Another practice has been to set up a creche at the nearby annual Mahalakshmi fair, attended by thousands of Adivasis, so that the Adivasi women can move about freely and come back in the evening to pick up their children. In its drive towards identification with the people there appears to be a noticeable "feminine" touch about everything that the GBSK does. These efforts have certainly built a trust in GBSK by the Adivasi women and a much stronger appreciation of its educational work than once existed, but this falls short of direct involvement in planning and participating in its activities. The traditional reserve of Adivasi women is still hard to break through.

Insofar as individual Adivasis are concerned, their participation in the activities of GBSK, especially at the higher level of jobs, is very low. All fifteen workers on the farm are Adivasis. Among the office peons all four are Adivasis. In the printing press five out of seven are Adivasis. But among office clerks there is none; in fact, no Adivasi application has ever been received. Among primary school teachers only one among the nine is an Adivasi. None of the staff of the training centers is Adivasi.

### *Education*

Inasmuch as earlier pages comment fully on GBSK's educational approaches and methods, only one point requires further emphasis here, and it touches on the complex problem of "assimilation." On the one hand the Warli must be weaned away from his inveterate

and persistent superstition and his primitive religious practices. He must be discouraged from harboring a sense of separate identity and from preserving cultural isolation. But at the same time he must not become detached from his heritage and his fellow men. He must develop his pride, for its source is his own cultural tradition. A balance may be difficult to strike, but it must be struck by dedicated educational effort.

A simple illustration of what we mean is provided by our visit to the night school where we found the teacher giving a lesson on festivals. We interrupted the procedure and asked the students to name some festivals they knew about and some gods and goddesses. In response they named the usual Hindu festivals such as Diwali, Sankranti, and Holi, and familiar Hindu gods and goddesses like Ganesh, Ra, and Maruti. We said jocularly to the boys and girls: "We have come from a far-off place where we never heard the names of these gods and goddesses. Our gods are Bharambha, Vaghaya, Naran Dev, Khalya Dev. Himai Devi...." (all Warli tribal deities). The joke was caught and there was a ripple of laughter in the classroom. When it subsided the children began to vie with one another, naming tribal gods and describing tribal festivals and seemed very pleased.

### *Reaching the Poorest*

Although the difficulties GBSK has undergone should not be minimized, GBSK has been reaching the poorest. Perhaps it is easier to reach them through education than through economic programs of the kind AI has been pursuing. In any event, GBSK had to struggle with indifference, even resistance, to the idea of education, particularly that of child education. It also had to struggle with a deep-seated, pervasive economic problem.

In brief, GBSK has employed the following tools in its struggle: 1) flexible, unorthodox approaches in organizing programs with a considerable element of nonformal education; 2) encompassment of the educational problem from many sides simultaneously: creche, preschool, primary school, meadow school, night school, teacher training, and hostels; 3) continuous effort in combining educational and income-earning activities; 4) efforts to involve parents and other villagers in festivals, functions, and celebrations of various kinds; and 5) unflagging attempts to establish closer relationships and understanding with the general populace.

### *Voluntary Organization*

Voluntary agencies generally have the attributes of dedication, flexibility, freedom to innovate, and informality of procedures. But there are other attributes. In the first place, they are likely to represent the needs of the people more accurately and to serve as conduits from people to the government. In the second place, they serve as an essential part of any genuinely functioning democratic polity by avoiding excessive concentration of initiative and power.

Their possible shortcomings are absence of continuity, smallness of scale, and paucity of means. Like the AI, the GBSK does not belong to the category of the "pure" type of voluntary agency. It has a mixed character, in that it runs certain governmental programs and uses government funds in some of its activities, but for all of this GBSK has generally succeeded in retaining the valuable attributes of a voluntary agency.

## SOME GENERAL CONCLUSIONS

This final chapter contains several conclusions and lessons derived from our study of the two institutes at Kosbad that we believe have relevance and possible value for other organizations similarly striving to improve the status of the rural poor elsewhere in India and throughout the developing world.

On the economic and technological plane the fundamental problem of the Adivasis is similar to that of small farmers all over the underdeveloped world. They have too small a resource base, and with existing technology their chances of survival are meager. Given this reality, the question that needs to be seriously considered is whether the main thrust of a poverty removal strategy should be toward helping the small man *on the farm or outside it*; and if outside, what real choices are open. We generally agree with the diagnosis of the problem offered by V. M. Dandekar and N. Rath in their book, *Poverty in India*, and with their conclusion that wage employment under government guarantee is the key to the solution. However, modifications will be needed to suit local conditions, and perhaps part-time *agricultural* employment (for example, in orchards under private or public management), rather than relying exclusively on construction works as suggested by Dandekar and Rath, may find an important place in poverty-removal programs in areas such as Kosbad.

If one accepts this view, then it follows that there must be a fundamental reorientation in the conventional thinking, approaches and attitudes of both government and voluntary agencies working in rural areas. The voluntary agencies will have to do three things: first, understand better the problems of their immediate clientele in a larger national perspective; second, press for adoption of viable national and state level policies in order that their own efforts may become more meaningful; and third, change and broaden their objectives and methods of work to suit the requirements of newer but eventually more promising tasks.

Much of the frustration from which voluntary development agencies suffer is attributable to lack of a congenial and feasible development framework. The sphere of voluntary agencies is bound to be small, and they can never be the principal instrument of social and economic change in modern societies; but they can play a special

and very crucial complementary role to government, provided there is an appropriate national policy and strategy framework within which to operate. The situation today in India is of a kind in which such a dynamic national strategy does not exist, and voluntary agencies, therefore, with all their dedication and idealism, seem to achieve relatively little. One important task of voluntary rural agencies, therefore, lies outside rural areas, and this consists of generating pressures for adoption of viable state-level and national policies for development.

Given their geographically and otherwise isolated spheres of action, separate voluntary agencies can achieve very little by way of generating political or intellectual pressures of the kind required. What is needed is a forum of such agencies. In Maharashtra such a forum exists called *Gramayan* (of which all three authors of the present study are founder-members and members of the executive), which since 1973 has been trying to perform a variety of functions to the extent that its meager financial and manpower resources permit. What *Gramayan* does is to hold meetings of representatives of agencies for discussions of mutual problems, and of governmental policies affecting the poor and Adivasis; to involve city people (*i.e.*, experts, students and others) in rural development problems and activities; to publish literature useful for workers; and to take up projects on its own. Ways and means must be found to set up organizations like *Gramayan* and make them more effective.

As indicated earlier, "smallness" is one aspect of the Adivasis' total problem; the other is his "Adivasi-ness." In practice this means that even an economically viable technology may not be accepted because of social and cultural obstacles. This applies to other poverty groups as well. Economists have to be wary about theories that assume that economic rationality is a universal characteristic of mankind irrespective of the stage of culture to which men belong. Although our data confirm the importance of the economic factor, they also underscore the crucial importance of cultural and social factors. In dealing with Adivasis (and other backward communities) the latter factors assume supreme importance, and thus an understanding of them becomes an important prerequisite of effective developmental effort.

The problems of the rural poor are magnified in the Warlis. In sharp contrast to poorer people from the entire coastal areas who migrate in hordes to Bombay, the Warlis have not been attracted to urban employment. Even in their own areas they resist change, no matter how grinding their poverty. Sociological research has not yet found the key to unlock the secret of the Warli's compelling attachment to his traditional values and his self-imposed estrangement. But in a continuing, often frustrating, search and research, it must be remembered that great strengths inhere in those who would hold fast to their birthrights and not alienate their traditions.

It would seem that many social workers, including those working in the Kosbad area, tend to believe that, once "exploitation" is removed, the way is clear; and so they direct their energies primarily

to agitational programs. There is no denying that exploitation has long existed and has often been a root cause in the creation and perpetuation of poverty. But purely agitational work can be counter-productive, to the extent that it makes the clientele believe that all their ills flow from sources outside themselves. It would seem that the lesson to be derived here is that constructive activity, even constructive criticism of the poor themselves (which may not make one very popular), is a *sine qua non* of success.

Of course the ultimate answer lies somewhere in continued education--education in its broadest sense as an induced learning activity. It must be made available to all ages, even though the adult generation under study may well be a lost cause. If it is sufficiently appreciated that the basic problem of underdevelopment is a *human* problem (that is, a problem of personality formation), it almost goes without saying that the process must begin and be emphasized with young children and youth--at the most impressionistic stage of life.

Education in new values and attitudes, however, must not result in taking away a person's identity and alienating him from his culture. To strike the right balance between tradition and modernity is always a difficult matter; yet the realization that a balance has to be struck, that every individual's culture must be respected, that his racial pride must not be hurt, will prove a salutary factor in all educational and development efforts.