An Adult Education Program for Orissa, India

By

William Cyril Osgood

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An Adult Education Program for Orissa, India

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EDITORS' PREFACE

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An Adult Education Program for Orissa, India

I

INTRODUCTION

India is entering upon a period of unparalleled political development as she attempts to inaugurate a free democratic government that will weld her diversity of race and religion into a national whole. Her position can be compared with the situation of Russia after the revolution of 1917 or with that of western Europe at the time of the Renaissance. Tides of new life and power that give promise of a spiritual and intellectual as well as political and economic rebirth are sweeping across the whole area. The war has brought to her a new consciousness of power and a rapid expansion of industrial life. It has called two and one-half million men out of the hamlets and villages of India and has given them a contact with the wider world as soldiers. They will not be satisfied to return to a way of living similar in many respects to that which characterized the peasantry of India two thousand years ago. India has a long history of culture and achievement, of which she is justly proud, but to a very large degree the masses have been deprived of a fair share in that rich heritage. Poverty, ill health, illiteracy, ignorance, intragroup conflicts, mutual suspicions, superstition, and exploitation have often been their lot.

THE PROBLEM

The World War II record of the Union of Soviet Socialist Republics has called the attention of Indian leaders to the progress made by that nation, which is recognized as in part due to mass or adult education. Ardent Indian nationalism insists on a social and educational status second to none. For the effective function of democracy and the constructive attack on the nation's many and varied problems a very much broader educational base is demanded than that revealed by the latest census which showed that in round numbers 47,000,000 of the nearly 390,000,000 inhabitants of India could read and write some one of that country's many languages.\(^1\) There were approxi-

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\(^1\)After the division of 1947 into Pakistan (East and West) and India the populations of each section were estimated in 1950 to be between 345,000,000 and 350,000,000 for India and 75,000,000 to 80,000,000 for Pakistan. India now has approximately 1,220,099 square miles and Pakistan approximately 461,311 square miles.
ADULT EDUCATION PROGRAM FOR ORISSA, INDIA

imately 3,000,000 literate in English. While the absence of ability to read and write does not preclude a shrewd and in some cases amazingly intelligent use of whatever comes within the experience of the villager, it does severely circumscribe the area of exercise of intellectual power.

As one of the eleven major provinces of British India, Orissa must bear an important part in any federal scheme and her people’s welfare be an intimate concern of the larger whole. It is an appropriate time for clarifying the special needs of the province of Orissa in respect to an adult educational program because the provincial Education Department has completed a study of the recommendations for educational development contained in the Report by the Central Advisory Board of Education on Post-War Educational Development in India, published in January 1944, which include a special section on adult education. This report will form the basis for widespread reforms of the educational system in all the provinces and states in the next few years.

The problem to be discussed in the following pages is, therefore, on the basis of Indian thought and experience and in the light of what is being done elsewhere in the world to meet the fundamental needs of underprivileged people, and through a knowledge of the situation in Orissa, to develop an adult educational program adequate to meet the basic needs of the Oriya people.

Objectives

The objectives of this study include an attempt to determine what broad fields of education are most essential to the welfare of Orissa in the light of her intense current problems. It must suggest definite goals and areas for study by the adults of the province. Some development of the methods or approaches by which this education may be brought to the people and their interest and cooperation enlisted in the program seems necessary. My own thinking in relation to the immediate problems of my missionary task and the wider problem of the constructive change of Oriya culture-patterns needs to be clarified. It will serve a useful function to present in clear fashion the problem and possible steps toward its solution to colleagues and officials. A study of the setting in which education is to take place is essential to any determination of either the content or the method to be used in that education.

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A vast majority of Indian States have not been merged into the adjoining provinces or grouped together to form new provinces or attached directly to the Central Government for administration pending final decision as to the division to be worked out. There are at present eighteen of the areas now called states rather than provinces. The eleven slightly differently administered areas formerly called chief commissioners' provinces as opposed to the eleven governors' provinces remain.
INTRODUCTION

Both philosophical assumptions and the experience of comparable groups in other parts of the world need consideration before goals and areas of study can be satisfactorily decided. The problems of inaugurating such a program and guiding it to a successful conclusion involve psychological and sociological factors of considerable interest. It is hoped that some concrete suggestions may be evolved which can be applied within mission circles pending action by the larger provincial or Oriya speaking whole.

WORK IN ORISSA

The writer has spent a little over fifteen years as a resident of India. Approximately thirteen years of that sojourn have been spent in educational and district missionary work in the northeastern part of the province of Orissa, in Balasore District. He was for a number of years the convener or chairman of the Adult Literacy Committee of the Utkal Christian Council. This committee was actively engaged in a study of the problems of adult education from the standpoint of developing a literate and informed Christian community within the province of Orissa and the twenty-eight Orissa States. Supervision of schools ranging in grade from kindergarten through approximately the Junior High School level has been a constant part of his responsibilities. The missionary task involves innumerable opportunities for trying out adult educational methods in conferences, conventions, workers' classes, and the like.

METHOD OF STUDY

In writing on such a subject in connection with one of the less well-known portions of India about which relatively little has been written, it has been necessary to draw heavily on my own experience in rural India. This is supplemented by the reports of others at work in India in a similar field. The literature on educational, if not specifically adult educational, problems in other parts of India is not inconsiderable. The experience of those at work on similar problems in other parts of the world affords a great deal of help and must surely aid in avoiding mistakes in setting up a program for a portion of the Indian scene. An effort has been made to find out what is being or has been done along this line in Greece, Mexico, Africa, China, and the United States. The techniques of the extension services of the land-grant colleges in the United States and the work of various religious bodies and foundations in the southern mountains in education of the Negro and the immigrant have been of great value in suggesting methods of approach and

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3 Twenty-four of these are now merged with the province, two with Bihar and two with Madhya Pradesh.
areas of need. Questionnaires sent out to fifty or more such groups have elicited a wide variety of replies and references to a number of published reports and descriptions of the programs being undertaken.

In the succeeding chapter of this study an attempt is made to describe the milieu of the people of Orissa which gives rise to the demand for an effective program of adult education. In the third chapter some of the studies and experiments which have reference to Indian education and indirectly, if not directly, to adult education are discussed. Following this, experiments and thinking in regard to the education of underprivileged people in Greece, Africa, Mexico, and certain surveys of a general nature are considered. A fifth chapter deals with American adult education meeting related needs. The application of this experience to the problems of Orissa is the subject of the sixth division of this study. A final chapter is given over to a summary and the portrayal of the recommended program for Orissa.

LOCATION OF THE STUDY

Orissa is one of the twenty-seven states constituting the Indian Republic. It has an area of 59,869 square miles and a population of 13,767,988. This territory is south of the province of Bihar and southwest of Bengal and extends for several hundred miles along the northeastern shore of the Bay of Bengal and for several hundred miles inland to border on Madhya Pradesh. On the southeastern border, Orissa joins the province of Madras. The province was constituted a separate province as distinct from Bihar and Orissa, of which it had been a part, by the Government of India Act of 1935. It has functioned as a separate province since April 1, 1937.

LIMITATIONS

The province has been functioning as a separate entity for so short a time and amid such disturbed war-time conditions that much useful information concerning Orissa is not available except as it shows the same characteristics as the larger Indian whole.

It has not been possible to visit the most outstanding adult education projects for underprivileged groups in the United States as had been hoped, but the attempt to secure information from them through correspondence, questionnaires, and descriptive published material has been fruitful. One is necessarily limited in studying so broad a field both from the standpoint of the time required for a thorough study of each phase or area of the adult education program suggested and from the very quantity of the literature available on certain of the areas discussed. It has been necessary, therefore, to set
INTRODUCTION

up the program in the most general terms. Ideally one should have set up the program and then tested it out and revised it in the light of further experience. Limitations of time have made it possible merely to set up a tentative program based on the recorded experience of others and personal contact with these problems over a period of years. The process of putting this program to the test must await the opportunity afforded by return to India and the verdict of such individuals and groups within the province of Orissa as may be persuaded to try it.

Definitions and Assumptions

The attempt to indicate what is meant by the use of the phrase "adult education" in the title of this dissertation is in order. It is not meant to limit the educative process herein described as "adult" to those who have reached their legal majority, but rather to include under the term all those members of the family or community who have reached an age, whether ten or twelve or older, when in the normal course it is unlikely that they will be able to gain admission to the ordinary primary or grade schools and obtain education in a more formal manner. By education in this context we mean the motivation, encouragement, guidance, and enrichment of the day-to-day experiences of the learner as he seeks to know what his real problems are and how they may be most successfully solved within the context of the maximum welfare of the group.

The following basic assumptions underlie the thought of the whole dissertation:

1. That in a country like India where the members of the older generation have a controlling voice in the joint-family and community life for many years after the children have left school, an education which does not concern itself with effectively reaching the adult members of society as well as childhood and youth is doomed to failure or at most to a progress utterly incommensurate with the effort expended.

2. That as the basic social units are the family or clan, the caste, and the village community one must, to attain maximum educational effectiveness, deal with these groups as units and work along natural primary group lines in striving to induce adjustment to a changing environment.

3. That the place to begin the educative process is at the point of present felt need and proceeding from this to derive insights into real needs and solutions for the problems which arise in normal adult life within the environment with which one is dealing.
4. That man is at least a four-sided animal, body, mind, and spirit plus an interrelatedness, a togetherness which we call society or social relationship. All four of these phases are so interdependent and intertwined that something approaching a simultaneous solution of the problems of each sphere must be achieved to make a truly whole man living in a wholesome social order. In other words, the principle of balance and coordinate adjustment must be followed if the tensions of rapidly changing modern life are to be resolved without demanding too heavy a price in maladjusted and neurotic personalities.

In order to discover the nature of the community to be served and the needs and interests of the adults for whom this educational program is planned, it is essential that an attempt be made to describe in some detail the situation of the people of Orissa. This is the task of the next chapter.
ORISSA, THE ORIYA PEOPLES, AND THEIR PROBLEMS

Perhaps the best general introduction can be afforded by summarizing the problems and resources mentioned in speeches by Mr. B. K. Gokhale, Adviser to H. E. the Governor of Orissa, and in Dr. B. R. Ambedkar’s speech as president of a conference convened to discuss the development of Orissa’s rivers as these speeches were reported in Indian Information.

Reviewing what they say about the province and its problems one finds an imposing list of handicaps and disabilities. It is backward, more than half of the province consisting of partially excluded areas, and twenty per cent of the people being classed as backward; that is, belonging to the depressed or scheduled castes. It consists of four areas forming a fringe to a group of Orissa States. It is characterized by unbridged rivers and poor communications. Flood, drought, cyclone, and famine follow each other in almost unbroken succession. It is a deficit province having to depend on financial help from the Centre. Newly organized, it inherits three different administrative systems. Unification of laws, administrative procedures, and revenue systems has scarcely begun. It is a one-crop province (rice). Poor soil, stunted cattle, an impoverished peasantry show their dire results in “low-income” disease, malnutrition, and vitamin deficiency among large numbers. The death rate is high; infant mortality huge. Malaria, filaria, leprosy, and yaws take a terrible toll of life and energy. Proper water supply and drainage are lacking even in the few towns of the province. University education is in its infancy, high-school education inadequate, and primary education entrusted to badly underpaid teachers in too few schools. Industry is almost nonexistent.

Against this depressing picture may be set the existence of a number of forest and mineral resources, great water potential with its possibilities of electric power, navigation, and irrigation. The province has considerable

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3Areas which have been given special treatment because of their backward condition and been protected by the provision that taxes raised in the area be spent in the area and that the Governor General in Council acting through the local Governor will decide how far provincial legislation should apply to them. Special provisions for financial help and protecting laws to prevent alienation of lands belonging to tribal or backward groups and the like are also made.
ADULT EDUCATION PROGRAM FOR ORISSA, INDIA

manpower possessed of artistic talent and craftsmanship, an inherent stamina, dignity, and intelligence that give promise for a brighter day when regional development and education bring under control the scourges that have devastated the country for centuries.

ORISSA, IN RELATION TO THE REST OF INDIA

There are eleven governors' provinces and six chief commissioners' provinces in British India which together with five hundred sixty-two Indian States make up the subcontinent called India. The province of Orissa together with the closely associated Orissa States occupies approximately one twenty-seventh of the area of all India and includes one thirtieth of the total population of 350 millions. In the decade 1931-41 the population of Orissa increased by 8.8 per cent as compared with an all-India average of 15 per cent. The Orissa States increased 12.7 per cent. There were in 1941 4,637 persons per 1,000 houses in Orissa as compared with 4,888 in the Orissa States and 5,116 in all India. There were at the 1941 census 5,846 houses per hundred square miles in Orissa and 3,408 in the Orissa States while the all-India average was 4,808. There were 26 towns over 5,000 in population in Orissa while the rural population was reported as living in 38,507 villages. The number per thousand in towns was 129 in all India and 872 in villages whereas in Orissa the urban population was 3.7 per cent and the rural 96.3 per cent. The Orissa States were even less urban with 2 per cent of their people in towns and 98 per cent in villages. The average size of villages in the Orissa States was 250, in Orissa and in all India.

According to more recent information provided by the Information Services of the Government of India, Washington, D. C, “There are twenty-seven states in India under the new Constitution promulgated January 26, 1950. These include nine states (previously provinces) with Governors as executive heads, six unions (comprising Madhya Bharat, Patiala and East Punjab States Union, Rajasthan, Saurashtra, Travancore-Cochin, and Vindhya Pradesh states), three independent princely states (Kashmir, Mysore, and Hyderabad), and nine Chief Commissioners' states (Ajmer, Bhopal, Bilaspur, Coorg, Delhi, Himachal Pradesh, Kutch, Manipur, Tripura). When India attained her independence (August 15, 1947), there were more than 500 princely states. But soon afterwards their consolidation began. Small principalities with meagre revenues were persuaded to merge with the adjoining Indian territory. Many others were encouraged to unite to form bigger unions. Six such unions, viz: Madhya Bharat, Patiala and East Punjab States Union, Rajasthan, Saurashtra, Travancore-Cochin, and Vindhya Pradesh, have been formed. At the head of each union is a Rajpramukh (president), who is advised in the administration by popularly elected ministers. The Chief Commissioners' States are administered directly by the federal government.”

Ibid. p. 58.
Ibid. p. 95.
Ibid. p. 74.
Taken in terms of the nearest thousand the population of Orissa in 1941 was divided as follows: caste Hindus 5,595,000; scheduled castes 1,238,000; tribal 1,721,000; Muslim 146,000; nontribal Christians 26,584, Christians of tribal origin 30,584, or a total of 57,168.\(^9\)

This comparison of the different communal elements in the population brings one to an appropriate point for considering the representation of different elements in the Orissa Legislative Assembly. Under the Government of India Act of 1935, as reported by Joshi,\(^1\) Orissa has a unicameral legislature.\(^12\)

Roughly ten per cent of the total population and a much larger per cent of the adult population have been given the franchise by the Government of India Act of 1935.\(^13\) The franchise in the whole of British India was given 29,000,000 men and 6,000,000 women.\(^14\) This is nearly five men to each woman voter.

In the matter of literacy 12.2 per cent of the total population of India were reported as literate in 1941 as compared with 6.9 per cent in 1931.\(^15\) In India as a whole at least 18 per cent of the males and 5 per cent of the females were literate in 1941. The figures for literates in Orissa in 1941 were, to the nearest thousand, 948,000. Of these, 840,000 were males and 108,000 females. The percentage of literates in the province was 10.9. In the States the total figure was 269,000, of whom males numbered 241,000 and females 28,000. This means that 8.8 per cent of the total population of the States was literate.

**Historical and Geographical Backgrounds**

Historically, Orissa, one of the peripheral kingdoms of ancient India, had been semi-independent or completely independent for centuries before the coming of British rule. There has been, nevertheless, a great admixture of Adi-dravidian, Dravidian, Aryan, and to a lesser extent Afghan or Moghul

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\(^9\)Abstract of Tables Giving the Main Statistics of the Census of the Indian Empire of 1941, p. 7.
\(^10\)Census of 1941, op. cit, p. 97.
\(^12\)Under the more recent reorganization the number of seats in the Orissa Legislative Assembly has been increased from sixty to one hundred forty and special representation of particular groups eliminated. All are elected on the basis of joint electorate of all voters in the legislative district, usually one or two thanas or taluks having a total population of about 105,000 people.
\(^14\)L. W. Bryce, *India at the Threshold*, p. 74.
\(^15\)Abstract 1941, op. cit. p. 7.
ADULT EDUCATION PROGRAM FOR ORISSA, INDIA

ethnic streams. The animism, Buddhism, Saivism, Vishnuvism, and Sun worship of the past have all contributed to the religious, cultural, and social development of modern Hindu Orissa. The brief Islamic and Christian contact has had its influence on the trends of recent thought.

Geographically, the deltas of Orissa's more than twenty rivers, building up soil out of the sea in the wide coastal strip, and the low mountains and table lands farther from the coast, contribute variety to climate, soils, and crops. The climate is tropical, mostly debilitating, though seasons differ enough to give a stimulating winter.

THE PEOPLES OF ORISSA

The people of Orissa, though various in ethnic backgrounds, with the exception of certain tribal groups which have maintained their racial and cultural identity, have become amalgamated and are not set off from the people of neighboring provinces by any clear-cut physical distinctions. They do have a cultural and linguistic entity. They show the effect of a not too successful battle with the handicaps of unfavorable climate, disease, and poverty.

Long residence in the country has induced in the author the greatest respect for the Indian peasant's humor, stamina, hospitality, cheerful or at least uncomplaining endurance in the midst of difficulties and handicaps, highly intelligent adaptation to use the materials at hand, and loyalty to his family or caste group. Given the same opportunity for health, nutrition, education, and freedom from fear and poverty, he could successfully compete in almost any realm of life with his opposite number in any country in the world. Through most of the eighteenth century India was as advanced as other parts of the world, but the rapid changes of the industrial revolution, which have taken place in certain Western and Oriental countries, have left the masses, though not the intelligentsia, of India far behind. Orissa, as a more or less isolated section of India, has been even less affected by these world currents than some other parts of the country. Within the last 25 years a new note has crept into Indian thinking and a renascent India is striving to catch up on three hundred years of rapid progress in a few brief decades.

The people are justly proud of their ancient culture, past achievements, and the resources of the present. They are perhaps the more critical of the West because of the period of more than a century under British rule. Self-rule will undoubtedly speed the processes of change already in progress.
LANGUAGES, EDUCATION, AND CULTURE

The major tribal groups have languages of their own which are highly developed grammatically, though not as rich in abstract terms as Oriya. There is in existence an Oriya dictionary of seven volumes with approximately twelve hundred pages to the volume which contains not less than 145,000 Oriya words. A very large variety of ideas can be expressed through this language. The vocabulary of some of the modern sciences, however, is weak. The language is related to Sanskrit, the sacred language of Hinduism, although its script differs widely from that of its parent. A real difficulty is involved in the fact that the language of literature has been very different from the spoken language of the province. The colloquial language varies from district to district and to some extent even within the district. Women have in many instances been kept so closely within the home and village that they have a dialectic expression which is difficult for the uninitiated to understand. The recent attempt under the auspices of the Utkal Christian Council to discover a vocabulary common to the whole of Orissa, known by the illiterate and semiliterate and still sufficiently broad to permit expression of most ideas men desire to communicate one to another, is highly important in developing understandings among the masses.

The average literacy for Orissa of 14.1 per cent for the population of all ages suggests that formal education at least has not been very successful. The Census Superintendent for Bihar and Orissa in considering this matter quotes a report of the education department as follows:

The losses due to wastage prevent all but a few pupils from becoming literate. Not only so but even of those it is impossible to say with confidence that they will not relapse into illiteracy. . . . Retention of initial literacy acquired at the early age of ten or eleven depends largely on environment, and the environment of the great majority of Indian pupils who leave school at the primary stage is not conducive to such retention. The parents in the village homes are usually illiterate, they are too poor to buy books, and attractive vernacular literature and periodicals suitable for children are not available, though there are vernacular books which might be read to children under religious impulse.16

There is an educational system, of the more or less formal type, running from primary school up through university, in Orissa. The University is but recently organized and while inclusive of the ordinary arts and sciences, medicine, and some other branches of knowledge, it has not been developed as far as similar schools in the older more populous provinces. In general, education is top-heavy and the lower or elementary schools sadly neglected. Rates of pay of primary teachers are pitifully low, though hope for the

future is held out by the more generous scales suggested in the "Sargent Report." The typical rural primary school is today, as ten years ago, a one-teacher school with two-teacher schools in some of the larger villages. While classes I to III are included the practice of having an Infant Class and Class I makes it roughly equivalent to the first four American grades. Referring to the situation in British India as a whole and taking its figures from the year 1936-37, the "Sargent Report" writes:

There were 11,985,986 pupils on the registers of some school or other as compared with 60,000,000 children in the 5-14 age-group. Of these children 5,188,601 were in class I, 2,355,418 were in class II, 1,722,922 were in class III, 1,214,504 were in class IV, and only 703,628 were in class V. The balance were in Middle Schools, including the middle sections of High Schools. Figures for previous years record a similar falling off. Attendance is of course better in some areas than in others, but in regard to British India as a whole, these figures mean that less than one out of every four stayed long enough in school to reach the earliest stage, viz., class IV, at which permanent literacy is likely to be attained. The result is that money spent on the others (nearly 80 per cent) may be regarded as largely wasted.

This situation must be corrected before there is any great hope of establishing adult literacy or effectively carrying on the type of adult education program envisaged in this paper. However, it would be a mistake to leave the impression that formal education, limited to a few years at most for a small proportion of village youth, is the only education available. There is a vast accumulation of mores and folkways. A folklore filled with mythology and legend, steeped in innumerable traditions, is part of the inheritance of each child and adult. The whole social organization and occupational character of the caste system tends to guarantee that as an apprentice in his father’s trade and as a participant in the life of the village each boy shall be brought to accept and to fit efficiently into his niche in the highly organized community into which he is born. The influence of the folk tale, the proverb, the festival or periodic religious ceremony, the metrical chanting or oral reading of the mythology and sacred lore of the past, the religious drama, and the occasional pilgrimage, while not formal education, is very considerable. The whole pressure of this type of education is toward conformity with the ways of the folk, perpetuation of the customs and practices of the ancestors of the group. Many of these, while perhaps adequate to the

17The report by the Central Advisory Board of Education on Post-War Educational Development in India of January 1944 has come to be called the "Sargent Report," after John Sargent, C.E.E., M.A., Educational Advisor to the Government of India, and is hereafter referred to by that briefer title in the text.

18Report by the Central Advisory Board of Education, Post-War Educational Development in India, p. 6.
situations to which they originally applied, are not adequate to meet the problems of today. This cultural inheritance is predominantly Hindu, rural, and agricultural. It is based on the profound social and occupational stratification of the caste and “jajmani”19 system. Some phases of it will be described in more detail under the section on social organization and religion.

**HEALTH AND SOCIO-ECONOMIC PROBLEMS**

The problem of Indian health is tied up with ignorance of the laws of health, of sanitation, and of first aid. The germ theory of disease is not known by the masses. The approach of most of them to the problems raised by disease is on the plane of superstitious appeal to magic, or the propitiation or exorcism of evil spirits thought to be causing the difficulty. Adequate pure food and proper drinking water are unavailable to the average villager and no real need of them is felt by many so long as they can fill their stomachs enough to still the gnawings of hunger and have at least a fair amount of the foods to which they are accustomed. Those who have lived long in rural India bear universal testimony to the huge economic loss that comes from preventable ill-health and the vast amount of suffering and debility.

It was thought, until the Bengal famine of 1943-44, that there would be no more crises of this type in India because transportation and Government agencies to deal with deficit areas were well organized. Yet 1,500,000 died directly of the famine and as many more of diseases contracted in their weakened condition. The year 1946 brought a situation which taxed world resources, as well as those of India, and threatened millions of people, though the strictest rationing with a bare 12 oz. of food grains per adult was enforced among not less than 55,000,000 people for many months. Even in normal times India has a huge deficit of food supply which must be solved by other means than dependence on outside resources in the world today.

Malnutrition, as a major health problem in India may be due either to too little food or to defects in the diet where the food is sufficient in quantity. The chief defects in India are likely to be in the lack of animal protein, vitamins, and fats. It is estimated that only three per cent dry weight of the foods of Asia are animal products such as meat, fish, milk, butter, and eggs as compared to twenty-five per cent of the diet in North America and Europe. Beri-beri is as prevalent among the middle class as among the poor. The practice of eating highly polished rice rather than the more healthful home hulled product is blamed for this. Rickets, pellagra, certain skin diseases,

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19This term refers to the intricate interrelationships of the Hindu caste system in the villages, determining the service clientele, responsibilities, rights and privileges of each occupational caste.
night blindness and other eye defects, osteomalacia in pregnant women, lowered resistance to colds and other diseases, high incidence of duodenal ulcer, and a host of other ills are blamed on improper diet. Robert McCarrison, for many years head of the Nutrition Research Laboratories at Coonoor, has said, "Malnutrition is the most far reaching cause of disease in India."20

Present production of cereals, pulses, fats and oils, fruit, vegetables, milk, meat, fish, and eggs falls short of the estimated amount needed to provide a balanced diet in India by from 10 to 90 per cent. Total food production in these classes reaches 112 million tons, and the needed increase for a balanced diet would require an additional 98 million tons.

Proper diet involves not only adequate production of the necessary foods but also the education of the people to use a balanced ration. This changing of the eating habits of a people is by no means easy, as those know who, amid famine conditions, found it difficult to get people whose diet had been predominantly rice to use wheat and millets. Adulteration of foodstuffs takes place on a large scale. Much is yet to be done in the matter of enforcing pure food laws. The methods of cooking employed do not usually preserve maximum food values. Much loss occurs through improper storing, through destruction by insects and rodents, and through the lack of refrigeration, dehydration, or canning to preserve foods which at one season may be plentiful to the point of a glut on the market and at another unobtainable. Inequalities of distribution of available foodstuffs are considerable. Economical long-distance transportation of perishables is yet to be developed.

Medical services are available in all the larger towns but aside from the services of untrained herbalists, whose ministrations may occasionally do good because of trial and error learning or some well-tried recipe handed down from the past, the vast majority of the rural people are without medical care to say nothing of trained, scientific medical care. There are at present in the neighborhood of fifty thousand doctors in India, one to seven thousand people, and eight thousand nurses. Ninety per cent of the doctors practice in towns while 87 per cent of the people live in the villages. Surgery and dental or nursing care are outside the experience and even the hope of the masses. One dentist in 230,000 people is the all-India record.

Some progress has been made in providing health officers for each district of from one to three million people, but a vast extension of the health departments is imperative. Specialized services such as vaccination, cholera inoculation, etc., are making some progress against smallpox, cholera, and

20Memoranda on Malnutrition as a Cause of Physical Inefficiency and Ill-Health Among the Masses of India, presented to the Royal Commission on Agriculture, 1926.
the plague. The common village belief in Sitala, the goddess of smallpox, and the belief in goddesses of cholera and other diseases, make it very difficult indeed to bring effective modern scientific methods of control to bear on the problems. Instead of burning the corpse of one who has died of smallpox or cholera, the ordinary procedure for most Hindu and tribal groups is to dump the body on the edge of the jungle or beside a nearby stream, thus spreading infection as far as possible. Cholera and smallpox are endemic in Orissa at all times.

Hookworm, amoebic dysentery, bacillary dysentery, typhoid and many other parasites and diseases, spread by lack of sanitation and protection of food and water supplies from infection, are very common. With rare exceptions, unsatisfactory provision for the disposal of human excrement or even the proper care and disposal of manure and refuse is made in village India. The bore-hole latrine, the simple septic tank, pit latrines, effective methods of composting refuse, the destruction of flies and mosquitoes through the elimination of their breeding places and many another lesson in sanitary practices will be essential, before the necessary changes take place.

Modern warfare has shown that it is possible practically to eliminate malaria from vast areas and from large groups of people. More than 100,000,000 people are stricken each year with malaria in India. The annual death toll of this one disease runs in the neighborhood of 1,500,000. Only those who have experienced repeated attacks of the disease can understand the toll of suffering and debility such figures indicate. Orissa, with almost ten per cent of the malaria deaths and only three per cent of the total population, is clearly a malarious region.

The mortality of infants in India stands at 150.9 per 1,000 while that of New Zealand is 25 per 1,000. The expectation of life in India at birth is only 27 years as compared to 63 in the United States at present. Taking into consideration the number of widows, barren women, etc., it seems from the evidence available that the average fertile married woman has to undergo the burden of eight pregnancies during her married life with an average of just under three of her offspring living into the productive years. Despite this great mortality, the net population of India grew 83,000,000 in the twenty years between 1921 and 1941, or more than twenty-seven per cent. There seems to be no answer to the terrific problems imposed by these facts unless, along with such improvement and extension of agriculture and industry as is possible, a vigorous attack is made on the problem of voluntary limitation of the size of families through birth control.

Sir Joseph Bhore, chairman of the Health Survey and Development Committee, in a recorded talk broadcast from New Delhi said: “At least
2¼ million persons are bed-ridden with tuberculosis and it probably accounts for half a million deaths each year." But tuberculosis and malaria are not the only scourges in Orissa. The districts of Puri, Cuttack, and Balasore have one of the highest incidences of filaria or elephantiasis of any area of equal size in the world. Leprosy, while present in all parts of the province, goes up to an incidence of nearly five per cent in certain areas.

A comparison of age groups within the population shows that probably half of the population is still under 21 years of age. If the marriage age could be raised to something like the average level in such countries as England and the United States, that would result in an appreciable lowering of the rate of increase in the population. It would also make possible longer periods of education for both girls and boys, though the accompanying financial problem would be very great.

Underlying all the health problems and those of population growth which have been discussed runs the grim spectre of economic want. In discussing the increasing struggle for livelihood and the mounting population pressure on the land, J. Merle Davis, quoting A. V. Hill, gives the Indian population density as 800 per square mile of its 500,000 square miles under cultivation of food and industrial crops, as compared to the eighty-five persons per square mile in the United States with its 1.6 million square miles under cultivation—a ratio of ten to one per head of the population in favor of the United States. The American land requirement per head of the population for producing a liberal diet is 3.1 acres. In India, the area under cultivation and land per person is 0.8 acre; of this area, one-tenth is used for industrial crops and not for food. This disparity in reality is even greater because of the primitive and inefficient farming methods of the Indian peasant.

The loss of land ownership and the rapid increase of tenancy is another aspect of the struggle for livelihood. Between 1921 and 1931 the number of landless agricultural laborers increased from 291 to 407 per thousand owners. In a survey conducted in Orissa and Western Bengal of 44 villages, the ratio of landless day laborers to landowners was reported as two and a half to one. The average per capita holding of the 1,300 landholders’ families reporting was .88 of an acre, and of this three-eighths or .33 acre

23L. S. S. O’Malley, Modern India and the West, p. 277.
per capita was land on which a crop was sure every year. The balance was high land. It cost in that pre-war time on a conservative minimum estimate Rs. 180 per year to support a family according to village standards. Only 22.25 per cent of the income needed comes for the families of landholders from their ownership of land. The balance needed must come from labor, cottage industry and the like.

The per capita income of the United States in 1936 was $624 as compared with just under $20 for India. The average American income thus figures out at 31\frac{1}{2} times that of the Indian. Despite any differences in standards of living, this disparity means a poverty that has to be lived with to be understood. Many of the upper-class Indians themselves have little conception of the economic pressures under which vast masses of the population of India live.

Vera Anesty, in the chapter on Economic Development found in O'Malley's *Modern India and the West*, writes of the results of the present land tenure system thus:

> It can be concluded that the main, though unexpected and undesigned results of British rule and the land policy pursued have been to alter the status and economic position of various classes. Although the absolute and relative burden of land revenue has been reduced, to the benefit of land owners, the burden of rents and permanent indebtedness have greatly increased, whilst sub-tenants owing to their liability to eviction and enhancement of rents remain at the mercy of their landlords. Moreover, pressure of population, the laws of inheritance, widespread indebtedness, and the prevailing poverty have led to the progressive subdivision and fragmentation of holdings, which means that many agricultural families now possess holdings too small to provide them with the means of subsistence. In addition, monetary premiums and irregular cesses are still illegally exacted by many landlords, who threaten to evict unprotected tenants who refuse to meet their demands. A large number of indebted tenant cultivators and of the growing body of wage-labourers are in a position of debt slavery, i.e., they are bound respectively either to continue to cultivate the land for the benefit of their creditors, or to perform services for their master, in return for loans which they can seldom even hope to repay.\(^25\)

This economic slavery and indebtedness, despite a number of laws intended to protect the peasant, has not been checked sufficiently to improve materially the lot of the ryot. His ignorance, resignation and inertia tend to perpetuate the system which is still legally very heavily overbalanced in favour of the "haves" as opposed to the "have nots."

Unfortunately a very large percentage of the debts incurred are not incurred for productive purposes but rather in connection with marriage and other social events, paying the expense of litigation, to buy jewelry, and to

tide over periods of ill-health or scarcity. High interest rates, which make it nearly impossible for the cultivator to hope to repay both debt and interest, are the rule despite limitation laws. An estimate, thought by the committee making the study to err in the direction of understatement, placed the average debt at the equivalent of six months income and the mean interest payment at sixty-five per cent per annum. One is forced to the conclusion that the people are becoming poorer though the rapid increase of population would suggest that total income of the country must be improving at a fairly rapid rate else these new mouths could not be fed at all.

The hope of materially decreasing this pressure on the land and transforming the life of India by rapid industrial development is more or less vain. The ambitious plan of the Bombay industrialists which involves the expenditure of 27.6 billion dollars and the five hundred per cent increase of industrial output in fifteen years will absorb but half of the increase of population during that period if five times the present seasonal and nonseasonal employees of factories in India are employed. (The 1945 figure, no doubt swollen by the war, is 2,520,291). There is doubt whether the Indian people, unless their income be greatly improved, can absorb five times the present production however greatly they might benefit by and need the produce concerned.

While industrial development should be pressed, the fundamental economic problem, in a country where 87 per cent of the population is rural with 73 per cent of the population directly dependent on agriculture, must be to improve the per acre production and bring more land under cultivation. That there is considerable room for such improvement is suggested by the figures of relative yields of various crops in different countries. Masani states that an acre of land in the United Kingdom produces an average of 2,000 pounds of grain while in India the same area produces an average of 690 pounds. Java has a record of 40 tons to the acre of sugar cane while the Indian average is ten tons. Egypt raises 450 lbs. of cotton to the acre, the United States 200 lbs., and India only 98 lbs. India produces but one-third the average yield per acre reported for Italy and Japan in rice crops. With 61 cattle per hundred people and 33\% per cent of the world's cattle, India produces only 12 per cent of the world's milk. Her cattle are estimated to be a $600,000,000 annual liability to her. Despite such low yields India is one of the great agricultural nations producing 26 per cent of the world's rice, 23 per cent of its tea, 22 per cent of its tobacco, 18 per cent of its sugar,

27Minoo Masani, Our India, p. 42.
15 per cent of its cotton, 7 per cent of its wheat and almost all of the world’s jute.28 If the per acre yield could be improved to approximate the world average, or better yet to reach the average of the best country’s per acre production, the problems of undernutrition and economic poverty would be largely solved.

SOCIAL ORGANIZATION AND RELIGION

India differs from other countries in its Hindu social system in that the whole social system is intimately connected with religion and it is a synthesis not so much of individuals as of groups. Social institutions have a religious basis and the prescriptions of social rules have religious sanctions. Any attempt to change mores and folkways must be intimately concerned with both social organization and systems of belief. The most characteristic institutions of village life are the caste, the joint-family, and the village community with its intricate interdependence of one group on another for services of various types.

The tendency to stratification is present in all societies. Status is more fixed and carefully defined in the older societies. Nowhere in the world has this stratification gone to the extent that it has in India. The Census recognizes between 2,500 and 3,000 distinct castes.

The attempt of the conquering Aryans to keep their racial strain pure and prevent intermarriage with the conquered people is one source of caste. Subsequently, religious sanctions were found for the system. A somewhat similar process is observable in white-negro relationships in some parts of this country where the restrictions seem fundamentally to be aimed at the prevention of such social intercourse as might lead to racial intermarriage. Caste and the joint-family are institutions in the sociological sense of the word.

Caste is part of the mores of a people and corresponds in a measure to class in American society, which while less rigid in its definitions of the status and role of the individual, is, nevertheless, everywhere present. The rank of castes is defined by their privileges with respect to occupation, wages, public gatherings, politics, education and marriage. Caste controls, as they are experienced, come as privileges and punishments that facilitate or block roads to certain basic goals: (1) freedom of movement; (2) acquiring and spending of wealth, which are necessary instrumental acts to obtaining food, shelter and clothing; (3) the securing of sexual responses; (4) the avoidance of being struck and of other forms of physical punishment; (5) avoidance of threats

28Ibid., p. 22-23.
which arouse anticipation of punishment, that is, fear; (6) access to instrumental techniques which secure money, namely: education, apprenticeship and political participation. These controls are most clearly operative in American society in white relation to the negro but are also active within white social groups. Human beings learn to accept restrictions such as these by means of identifying with other persons within the family or group who have been punished for not learning the required behavior. Well-disguised forms of getting even for the restrictions are seen in the negro's sabotage in his work for white people (slowness, lack of punctuality, clumsiness, use of flattery, humor, secretiveness, ignorance, and other behavior for outwitting white people). The missionary experiences an amazing amount of similar behavior in his dealing with Indian people and has reason to believe that similar reactions are often present in relations between Indians.

One would think that a system, open to so much criticism as caste has been on the basis of its contradiction of democratic principles and denial of fundamental human rights, would be breaking down in the modern world. There is no doubt that the necessities of railway travel, factories, military organization, piped water supplies, and the like have compelled many readjustments. What Sir Alfred Lyall called "the extraordinary elasticity of practical Hinduism, by which frictions and anomalies can be invented or tolerated at need" has been equal to the exigencies of changing modern civilization. While some relaxation of caste has occurred among the educated classes, especially among the higher castes and the wealthy, with rare exceptions this has not extended to the point of intercaste marriage or induced a degree of social mobility comparable to that of America in the last generation. The great stronghold of caste is in the rural areas and even the scheduled or untouchable groups observe caste restrictions with a tenacity that is amazing.

Farquhar, in *The Crown of Hinduism* analyzes the five main divisions into which the myriad castes of modern Hinduism fall:

<table>
<thead>
<tr>
<th>Name</th>
<th>Caste occupation</th>
<th>Notes</th>
</tr>
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<tbody>
<tr>
<td>A. Brahmans:</td>
<td>Priests</td>
<td>The three twice-born castes, supposed to be of pure Aryan blood, and called twice-born on account of their education. They alone wear the sacred thread.</td>
</tr>
<tr>
<td>B. Kahatriyas:</td>
<td>Rulers and warriors</td>
<td></td>
</tr>
<tr>
<td>C. Vaisyas:</td>
<td>Businessmen and farmers</td>
<td></td>
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ORIYA PEOPLES

D. Sudras: Servants } Aborigines admitted to the Hindu community.

E. Panchamas (i.e. fifth-class men), called also Outcastes, Untouchables, etc. } Unclean aborigines and progeny of mixed marriages.31

Caste regulates the Oriya Hindu's entire social living. While bound up with the sanctions of religion and considered a divinely established institution, it is in reality more a social than a religious system. The restrictions of caste take the form of taboos, some of which are more serious than others, but which together prescribe in the most binding fashion what constitutes polluting conduct and what constitutes nonpolluting conduct. Food taboos connected with caste have been described as follows:

(1) The communal taboo, which prescribes the persons in whose company anyone may eat food.
(2) The cooking taboo, which prescribes who may cook one's food.
(3) The food taboo, which prescribes the kind of food one may eat.
(4) The eating taboo, which prescribes the ritual one may practice at a meal.
(5) The drinking taboo, which prescribes the persons from whom one may take water.
(6) The smoking taboo, which prescribes the persons whose pipe one may smoke.
(7) The vessel taboo, which lays down the sort of vessel one may use in eating, drinking and cooking.32

What is so well developed in the regulation of the eating habits of a people extends to other phases of social intercourse and the taboos in the realm of groups or individuals with whom marriage is possible are even more onerous. Occupation is also a concern of caste and the lower the caste the more limited the occupational field open to them.

Caste brings a reaction on man's estimate of himself and of others which is based on the accident of birth rather than standards of worth or potentialities inherent in the individual. It is binding and exclusive both as regards occupation and fellowship. It is productive of attitudes of overweening pride and of inescapable inferiority. What he is capable of doing or what his actual accomplishments are is not the basis for value judgment but rather into

what cell in the traditional social structure was he born. It lays on him ritualistic and ceremonial caste duties and restrictions which may be extremely out of line with the practical necessities of a changing world. It tends to set bounds to human sympathy and encourages indifference to the welfare of those outside the caste. "The unwritten law of custom takes the place of ethical principles. Custom as interpreted and enforced by caste, also leaves little room for individual freedom. Capacity for independent action and personal responsibility are supplanted by caste law."33 Both duty and privilege depend upon birth.

The Hindu joint-family is at once a social, religious and economic group. In north Orissa, at least, it partakes of the nature of a joint-stock company, with property held in common, although the sons do not become coowners until the father's death. All members of the family are entitled to be maintained from the family funds according to their needs and are bound to contribute to them according to their abilities. Common religious and ceremonial observances, including worship of the household or tutelary gods and following the prescribed rules of duties to ancestors, are expected of the household. "An orthodox Hindu must have been born in a Hindu family, must have undergone all the necessary ceremonies as a child and young man, and must continue to live as a member of his family, obeying all the regulations and fulfilling all the duties of a householder."34 The family is held together by obedience to the authority of the head of the family. This head is responsible for the management of the joint property and for the prevention of any conduct which is contrary to caste rules or propriety.

Continuance of the joint-family organization depends upon the consent of its members. While in the last century and earlier it was not uncommon for the family to continue for generations in undivided state, it has now become common for the joint-family to break up either upon the death of the father or at a time when the children of some of the sons reach adulthood and are about to marry and set up for themselves. It also may happen that while provision has been made for the various coowners of the family property to live apart, even in different villages, the property is still held in common. If a son goes away from home he is often expected to contribute to the expenses of the family. The change described means the substitution of small families consisting of parents and children only as compared with much larger earlier units. Nevertheless, the degree of control exercised by

the oldest male member of the family and his wife is very much greater than in most American homes and continues in many cases for many years beyond the time at which sons reach their legal majority. Family loyalty is one of the major forces in Indian social life and has much of value in it.

The laws of inheritance involved in the Hindu system make for a fragmentation of land and the scattering of holdings which is uneconomic. Each son is entitled to an approximately equal share of the land. Often the eldest son receives a slightly larger share than the rest. The unmarried daughters are entitled to maintenance and marriage expenses. The division in rural areas is often made in such a way that each son has an equal share in each field held by the family. Expense of consolidating scattered holdings is very considerable not only because of actual expense of registration of deeds but also because of the fees, often far beyond the legal limit, charged by landlords and their agents for changing their records.

A strong sense of family unity is developed in which the spirit of sharing and helpfulness are attractive features, but the lack of initiative and self-reliance have been found to be handicaps in modern life. Its achievement of solidarity and continuity over twenty-five centuries must command respect. It functions as a sort of social security or unemployment insurance and develops a real sense of responsibility for the care of the aged, infirm, or otherwise incapacitated members thereof which has required the development of public responsibility and institutional care in Western society. That it perpetuates and conserves the traditions of the past and blocks change to a considerable degree is perhaps inevitable.

Whatever the future of the Hindu family, its influence will be great for generations and the relationship of the seven generations of sapindas (the one who makes the monthly offering to the ancestors and the three generations preceding him and the three subsequent) will be a determinative force in all group relations in the education of the future.

We have seen that the Hindu social organization or system is a synthesis not so much of individuals as of groups. It is therefore necessary to show how the caste and family group is fitted into the village or community organization. W. H. Wiser, in his careful study of this organization writes:

... each individual has a fixed economic and social status, established by his birth in any given caste. If he is born into a carpenter family, he finds himself related by blood to carpenters exclusively. All of his paternal and maternal relatives in that or other villages are members of the carpenter caste, and that alone. The men folk in all these families earn their livelihood through the carpenter trade, sometimes supplemented by agriculture. Each carpenter has his own clientele, which has become established through custom, and which continues from generation to generation. Where the village is large enough the clientele will
be limited by the boundaries of the village. If the village is not large or the members of the carpenter families are too numerous to meet the needs of one village the clientele extends to small neighboring villages where there are no carpenters in residence. The relationship once established cannot be broken except by the carpenter himself who may choose to sell his rights to another carpenter. It is heritable and sometimes transferable. The relationship fixes responsibilities both on the carpenter and the one whom he serves. The carpenter during the sowing season must remove and sharpen the plow point once or twice a week. During harvest he must keep sickles sharp and renew handles as often as demanded. He must repair a cart whenever called upon by a customer, or make minor repairs on the customer's house. In exchange he receives at harvest twenty-eight pounds of grain for every plough owned by his client. . . .

This service relationship is established not only between carpenters and other residents of the village but affects all castes. Each caste in the village at some time during the year is expected to render a fixed type of service to each other caste. . . . The carpenter calls his entire clientele his "jajmani."35

The value of the concessions granted is much greater than that of the actual cash payments to different occupational groups. These include free residence site, food for family, clothing, food for animals, timber, dung, rent-free land, credit facilities, opportunities for supplementary employment, free use of tools, implements and draft animals, use of raw materials, hides, funeral pyre plot, casual leave, aid in litigation, variety in diet, healthful location. The concessions do not apply equally to all and vary according to custom but are of very great value and will not be lightly discarded.

This system constitutes a federation of groups or castes in which the individual must subordinate his wishes to those of the group and the group to the decisions of the central authority or panchayat (council of village elders). Many of the privileges derive from the communal ownership of certain grazing or waste lands. The village community is surely the primary political, social, economic and religious unit of society in India and must therefore be at the center of any planning for educational change. A satisfactory relationship between server and served and a relationship between groups in the community made by common consent and subject to change seems necessary but in many cases the relationship is not balanced and symmetrical and is fixed, common consent is "frozen," and opportunity has not been given to express opinions that might alter the relationship for 2,000 years.

Both internal and external adjustment are required to meet the exigencies of a changing environment but flexibility is not characteristic of

village India and its close organization leads to isolation and often to low standards of living. There are social and economic advantages secured through the farmers living in villages rather than in scattered homes and the division of labor gives opportunity for the development of some skilled crafts on the apprentice system. The readiness of the average villager to subordinate his interests to those of the larger community is a value which is not too often found in the individualistic West.

Absolute individualism cannot lead to social and economic satisfaction and stability. It leads to privileged group license, to unbridled self-interest in business practices, to insatiable desire for profit and the accumulation of wealth, to emphasis on competition rather than cooperation, and to social and economic disorganization.36

No man has a right to live entirely unto himself and the strengths of the mutuality of relationships in the Indian village must be preserved while its weaknesses are overcome. Religion has had much to do with the acceptance by the individual or the group of the role assigned to them.

Systems of belief as well as forms of organization must be understood if education and intelligence are to be effectively applied to the governing of men or the improvement of group adjustment and welfare. What constitutes essential Hinduism? Only the briefest possible examination of major beliefs is feasible. Farquhar says:

Here, then, we have the Hindu world-theory in all its permanent essentials: God real, the world worthless; the one God unknowable, the other gods not to be despised; the Brahmans with their Vedas the sole religious authority; caste a divine institution, serving as the chief instrument of reward and punishment; man doomed to repeated rebirth and death, because all action leads to rebirth; world-flight the only noble course for the awakened man and the one hope of escape from the entanglements of sense and transmigration.37

In connection with the family a statement was given of what constitutes orthodox Hindu duties in that sphere. A further statement from Farquhar suggests:

An orthodox Hindu must have been born in a Hindu caste, must have undergone initiation if he is a Brahman, Kshatriya or Vaisya, or some other equivalent ceremony if he belongs to a lower caste; and he must continue to observe all the rules and regulations which are traditional in his own caste.

An orthodox Hindu must worship the gods either in the old Vedic fashion or in the temples. He must acknowledge the Vedas as the one revelation, and must employ Brahmans for all priestly duties, whether in his home or elsewhere. No one but a Brahman can sacrifice, conduct religious ceremonies, act as a religious teacher, or proclaim the law.38

36Ibid., p. 192.
37J. N. Farquhar, op. cit., p. 216.
38Ibid., p. 217.
The liberties of the Hindu are outside this circle of "dharma" (right conduct). He need not believe in any god or any theology, know or read any sacred book. Atheist, agnostic, or devotee, no questions are asked so long as he conforms to usage. Yet beliefs such as "karma" (an extreme form of "whatsoever a man soweth that shall he also reap"), transmigration and world and life negation based on the doctrine of "maya" (or the illusory nature of the real world, central religious truth is the grasp of one's essential oneness with divinity resultant from cessation of action, renunciation of desire and the practice of austerities) are profoundly influential.

The feeling is widespread that fortune or misfortune in this life are the inescapable result of deeds in this or a previous existence and that any attempt at the alleviation of suffering is an interference with the justice of the gods. This conviction hamstrings efforts for social betterment and brings religious opposition to the aid of indifference and inertia in preventing activity directed toward removing evils such as ill-health. The extension of the concept of transmigration to include the possibility of rebirth in animal or even insect form as well as in lower or higher human status, brings an undiscriminating respect for all life. Religion permeates the whole of life in a sense and to a degree not common in the United States and its cooperation is essential in educating for the new day.
III

INDIAN EDUCATIONAL NEEDS AND METHODS

HISTORICAL SKETCH

At the time when the British were consolidating their power in India the ancient system of education was found decadent because of centuries of strife. Very little interest was taken in education by the East India Company until 1813. An action of parliament then forced some expenditure which went mostly to Sanskrit and Arabic education. A controversy over Western versus Eastern and vernacular versus English education was won by Western and English education. Despite the constructive Wood despatch of 1854 and some development of popular vernacular schools, the pressure of popular demand for the higher English education as an avenue to employment made the system top-heavy. An examination system fixed on the country in part by the organization of the three presidency universities as examining rather than teaching bodies helped to further bias the school system away from the real needs of the rural masses. Unemployment among educated youth and a rising tide of national feeling brought increasing dissatisfaction with the system. Yet until well into the twentieth century no effort to broaden the base of primary schools and to make the system more indigenous and less examination centered had been very successful.

After the inauguration of the reforms in 1919 a seventeen-year period of expansion in enrollment and expenditure followed which did not produce commensurate results in increased literacy because of heavy wastage and unwise administration of a system in need of radical reform. Congress governments, established in seven provinces when the Government of India Act of 1935 went into operation, gave opportunity for Mahatma Gandhi to give the lead in advocating a system of basic national education which was to be universal, free and compulsory, organized around a craft as a core, which craft was to produce sufficient marketable goods to pay teachers' salaries. Education was to be in the mother tongue. The Zakir Hussain Committee brought in a remarkable report, an outline of the curriculum and a class by class syllabus for the scheme. It emphasized the democratic principles and education for constructive citizenship which were the ideological background of Congress thinking. A brief period of experiment with basic schools followed in most provinces.

GOVERNMENT STUDIES

Meanwhile in 1935 and 1937 Dr. Frank Laubach, a missionary to the Philippines, who had made remarkable progress with a method of teaching
illiterates to read, stirred the imagination of many in India to the possibility of making India literate through his tours and writing. The Central Advisory Board of Education had been resurrected and started an important series of committees to work on various phases of education. The work of these committees, together with the experience won by the autonomous study and experiment carried on by the various provinces, notably the United Provinces, culminated in a far-reaching proposal for educational reform and post-war development in India. They kept the main features of the basic education scheme, leaving out only the idea that the basic craft should make the school self-supporting, at least to the extent of covering teachers' salaries.

This plan includes the provision of compulsory education for all boys and girls between the ages of six and fourteen. Education is to be uniform for all between the ages of six and eleven at which point provision shall be made on leaving the junior basic school for the majority 80 per cent to go on to the senior basic school which is expected to be the finishing school for the great majority of future citizens. On leaving it the pupil should be prepared to take his place in the community as a worker and a future citizen. Senior basic school emphasizes corporate activities and should give a final perfecting to the basic craft chosen as suitable to the local conditions. The other types of school, to which children may be transferred at the end of the junior basic stage, should provide a variety of courses extending over a period of at least five years after the age of eleven. These courses, while preserving an essentially cultural character, should be designed to prepare pupils for entry into industrial and commercial occupations as well as universities. These high schools were planned for approximately twenty per cent of those passing out of junior basic school. College education was planned for one in fifteen of the high school graduates. Provision in the scheme is made for 1,000,000 nursery school children under six and for the liquidation of adult illiteracy of those below forty, in twenty-five years. This literacy must not be treated as an end in itself but as a means to the end of inaugurating a full program of adult education. Some two million new teachers must be enlisted and trained to carry out the scheme and its estimated annual cost of Rs 2,770,000,000 as compared to a 1940-41 expenditure from public funds of Rs 175,000,000 must be found.

This ambitious scheme is before the provincial government for consideration. It is criticised by many as underestimating both the sheer numbers to be dealt with and the costs of the provision that has been suggested. The courage and imagination with which the Board has sought a reorganization of education more in line with the trends of recent national and educational
thinking is highly commendable. On the basis of census figures it seems apparent that, in all India without taking account of probable increase in population during the time it will take to put the scheme into effect, there are at least 90,000,000 children within the age range contemplated for compulsory action as compared with the 60,000,000 on which the report counts. Whether or not the senior basic school can be made sufficiently attractive to counteract the pull of high school education with its hope of employment in industry, government, commerce and the like is an open question. The bases for selecting the twenty per cent who are to be given the high school opportunities have not been sufficiently developed to be reassuring. The inadequacy of nursery school provision is evident to all. The adult education scheme embodied deserves a fuller description.

The estimate of the population of India over five years of age considered literate was 14.6 per cent, even if the rather generous provisional census estimates are accepted. Literacy is taken to mean no more than the ability to read and write some language among India's more than 225 languages. The developments in adult education in recent years have been confined mainly to the production of literacy. A child must learn to walk before he can run and the adult must learn to use the major tool of education before he can benefit much from an adult education aimed as broadly as the "Sargent Report" contemplates: "It should aim at giving effect to the democratic principle of continuous, lifelong and complete education for all according to their ability to profit by it. In other words, the role of adult education is to make every possible member of a State an effective and efficient citizen." The report argues that aside from its intrinsic value it is needed as a powerful auxiliary to primary education in speeding up the process of making the country literate. Permanent solution to the problem of literacy must no doubt be sought in universal compulsory primary education. Literate adults will, however, make the progress of primary education more rapid and effective. Parents need to be brought to appreciate the value of education and understand what education really is. Respect for education on the part of the adult is more apt to come if it helps him in some measure to improve his economic position. Hence practical, civic, and cultural subjects must be included and the relationship to life kept so clear that its value is apparent to all. Vocational as well as academic subjects are to be taught. Literacy to be of any real value must be permanent. To learn to sign one's name and recognize printed words or even rudimentary

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1 Report by the Central Advisory Board of Education, Post-War Educational Development in India, January 1944, p. 35.
acquaintance with the three R's was not considered enough. The goal of literacy is "that whole education of the individual's personality which will develop to the highest degree his physical, intellectual and moral faculties, raise him to the full stature of a man and transform him into a conscious and useful member of society." Literacy that shall make one capable as well as desirous of further education cannot be developed in less than one hundred hours of instruction. Included must be the three R's, rudiments of civics, economics, history, geography and hygiene. The course should cover a full year. The expectation was that they might attend four hours a week for perhaps six months of the nonagricultural seasons in the year.

In the scheme, they insist that it is wasteful to admit into primary school a boy or a girl who cannot stay at least four years and consequently set the lower age limit at ten years. The upper limit is given at forty. It is suggested that separate classes would be advisable for boys between ten and sixteen and desirable but not so necessary in the case of girls of the same age ranges. Dealing with the estimated population, for British India only, within the age range ten to forty and excluding the percentage already literate, the committee came to the conclusion that 127,000,000 persons would need to be made literate over the twenty-five year period of the scheme. Counting on primary or basic education to care for all those passing into the age range during the period and counting out those who should reach forty before the proposals could be brought into full operation the committee insists that only 90,500,000 persons would have to be made literate during the period. The emphasis is to change, from almost exclusive emphasis on literacy, to a full program of adult education in the broader sense by the end of the 25 years.

The problem of adequate supply of teachers is dealt with, by estimating the proportion of the present staff of teachers (518,018) likely to be found suitable and willing to take up adult education work, as 150,000. Added to these, 50,000 nonprofessional teachers are hoped for after a period of training. They rely on about half of the new teachers to be trained for the national system of education, taking up adult education work as well as their regular teaching in basic and high schools. They expect to reach a staff of adult teachers of 258,000 by the twelfth year and to maintain this staff thereafter gradually transferring their efforts to adult education proper as the need for literacy work becomes less. The pay of these teachers is estimated at Re.1 per 100 pupil hours and the estimate is built up on 25 students per class.

*ibid.*, p. 39.
The report emphasizes that:

Adult Education, even in its simplest form is not an easy business; it demands a special and exacting technique. Enthusiasm and good intentions alone cannot make a good teacher, nor can success of a teacher in a children's school be a guarantee of his fitness to teach adults. . . . the teacher's manner should be stimulating and his matter interesting. A high degree of tact, understanding and ability to inspire and lead is required of the teacher, for he has to deal not with a child, who is mentally raw and receptive and who has compulsorily to attend school, but with a grown up person who requires more stimulating and interesting instruction and who is likely to leave the class the moment he finds the lessons not worthwhile. It is therefore, necessary to keep alive the interest of the students, to make the instruction practical and to relate it to their own activities and environments. Lastly, the personal factor is still more important in an adult school than in a school for children. The teacher is not a superior being on a pedestal but only another man or woman who happens to possess greater knowledge in certain matters. Relations between the teacher and his adult students must therefore be both close and cordial.3

In stimulating the interest of the adult, the fullest possible use of visual and mechanical aids such as pictures, illustrations, artistic and other objects, the magic lantern, the cinema, the gramaphone, the radio and the like are recommended. Drama, folk dancing, vocal and instrumental music are also commended for their recreative and interest values.

Buildings will be obtained largely through the use, after hours, of rural development centres, school buildings, public health and other public buildings. Numerous and adequate libraries are an essential to the scheme. Each school for adults should have a library of its own. The backing of public interest and enthusiasm is essential to carrying through such a program. The importance of making women, particularly mothers, literate is obvious and the scarcity of educated women teachers lays an obligation on every educated girl or woman. The girl pupils of colleges and high schools should be encouraged to take up social welfare and educational work and even the younger pupils attempt to make their own families literate. The possibility of making a period of social service obligatory on all students in the upper forms of high schools and colleges should be canvassed. Freedom from experiment must be allowed and regard must be had for local conditions. Public opinion must be enlisted to encourage adults voluntarily to undergo instruction, but failing response on a voluntary basis, ways and means of bringing pressure to bear on them must be discovered.

Control of the adult education movement should be vested in a single authority in each province and that authority should be the Education Depart-

3Ibid., pp. 41-42.
ADULT EDUCATION PROGRAM FOR ORISSA, INDIA

Contacts should be established with all other authorities in the province concerned with social reconstruction. A staff for supervision and organization of the movement will be required. Both provincial and national bureaus to collect and disseminate information with regard to the adult education movement are necessary. The total expenditure proposed over the twenty-five year period is Rs. 597,109,500. Excluding the preparatory five years it is expected to involve an annual cost of approximately Rs. 30,000,000.

There are many criticisms which might be leveled against this program as wishful thinking, rather than practical planning, and yet it is the most concrete and far reaching proposal that has yet come before the Indian public and it comes at a time when national enthusiasm for such a move is high enough materially to aid the attainment of the goals undertaken. A note of warning must be sounded, based on the experience of the years following the publication of charts and materials under the impetus of Laubach's visits. It was found that a very large proportion of the classes started at that time ceased before any permanent results were attained. Some more stable emotions or motives than the enthusiasm engendered at that time will have to be enlisted ere the sanguine expectations of the committee can be realized.

MISSION STUDIES OF THE EDUCATIONAL PROBLEM

Missions have for many years been cognizant of the need for adult education and engaged in various adult educational practices. K. T. Paul, one of the leaders in a South India rural reconstruction project under the auspices of the Y.M.C.A., is quoted by Miss A. B. Van Doren in Fourteen Experiments in Rural Education published in 1928 as follows:

The population is so immense, the rate of its progress is on such a scale, the number of things to be learnt is so infinite, the necessity of learning them is so tremendously urgent, the cost of education even in its simplest and humblest style is of such enormous proportions, that the education of India can never be brought within manageable grasp unless we have a scheme of education which is indispensably inclusive of attention to the adult.

In 1930, as a result of the visit to India of Dr. Kenyon L. Butterfield, an authority on rural work, a book called The Christian Mission in Rural India was published which sums up a series of conferences held by him. At the heart of his recommendations was a so-called "Rural Reconstruction

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^Approximately $125,707,263 at Rs. 475 per $100.
^Approximately $6,315,789 at Rs. 475 per $100.
^A. B. Van Doren, Fourteen Experiments in Rural Education, p. 36.
Unit.” This unit was to consist of a group of perhaps ten or fifteen rural villages contiguous to a rural community middle school. A full program of reconstructive service was to be made available to all the people of the unit through pooling the effort of all agencies for educational, health, economic and social progress through some form of community council. Local cooperation was to be enlisted in building a new type of community. The last two principles enunciated in connection with the school are of special interest. They are: shorter courses for older boys and young men; and adult education a major feature of the school.7

In elaborating this point he says:

The community school is a school for the whole community. In the rural reconstruction units in India, the community school must pay as much attention to the youth out of school and to the adults, both men and women, and to their continuing education, as it does to the pupils in the schools. For this school the village primary schools are organic in the scheme and really part of the community school whether or not they are actually administered by the central school. Thus the community school literally implies that the whole community is kept in school. It is not merely a school with a community outlook and atmosphere, but it is a school that will actually give continuing education to all the people of the community.8

This concept of “Rural Reconstruction Units” and of a school which shall be in a real sense a community school has been profoundly influential in mission quarters. Among those who have attempted to put into practice such a conception of education are Rev. and Mrs. Frederick G. Williams in their school called “Ushagram” near Asansol in southwest Bengal. In 1937, in an introduction to a doctoral dissertation at Teachers College, Columbia, he wrote the following significant paragraphs:

For a curriculum study to be really functional, it must meet not only the needs of the child, but the needs of the social group of which the child is a member. Under such a concept the curriculum becomes as broad as life itself, and the experiences of the child as he moves into the larger social group become the materials of instruction with which the teacher leads toward the solution of need.

The thesis of this study maintains that the resources of the environment should be the materials of instruction with which the teacher and the children of the community try to resolve their felt needs. The individual social needs of the people form the content of instruction. The method of instruction in meeting these needs is by cooperative community enterprise in which children and adults join, and in which the school cooperates with other social agencies.9

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8Ibid., p. 73.
9Frederick G. Williams, Foundations of a Functional Curriculum for Rural Schools in Western Bengal, pp. iii-iv.
This concept of education as a cooperative community enterprise in which children and adults and all social agencies join in meeting individual and community needs is an important development which defines the relationship of adult education to general education and brings welfare agencies of other types as the cooperative society, health department, and agricultural department into functional union with the activities of the education department.

A further suggestion from Williams indicates that “the primary interest of the school (perhaps of adult education, too) in the rural life of Bengal must be that of social change. This does not mean that the worth of childhood is to be ignored, but that the child’s progress can come only as the entire community advances.”

Most educational planning has fallen far short of planned social change and has failed to take into account the community pressures of use and wont which make individual progress, particularly in the Orient, so difficult. Planning thus in terms of community advance puts the tool of literacy into proper perspective as valuable, as it contributes to the important social needs of individuals and the group.

In considering the relationship between needs and the resources available within the environment Williams’ words quoted below need to be underscored and burned into the thinking of every “arm-chair” department head or social worker until he or she shall so live into the life of the community that he shall be able both to understand the resources and see what “available” really means in relation to the villager’s actual situation.

The more sensitive the village teacher is to the resources of his environment, the more valuable will be his service to the community. There is no use talking about the needs of life in any other terms than the resources available to meet those needs.

Such an approach would do much to bring extension workers out of the clouds of urban life or of possibilities open only to the very wealthy to the realities the ryot faces in his poverty and ignorance.

The distinction between real and felt needs drawn in another place is also of importance. The fact that real needs of the Indian peasant have not been felt by him is given as one of the reasons why so many of his problems have scarcely been touched. In the presence of cholera or smallpox, instead of thinking of inoculations, pure food and water supply or vaccination and quarantine measures, the villager thinks of propitiating an angry goddess of cholera or smallpox. Williams suggests:

The needs are not felt because misery is woven into the very texture of the culture of the people and of the philosophy of life which has taught the Indian villager to be patient and long suffering. He is the

10 Ibid., p. 70.
11 Ibid., pp. 92-93.
slave of disease and pain. Men mangled in accidents endure their pain without a whimper. It is difficult to imagine the physical pain withstood patiently by millions of villagers who have no access to dentists and surgeons. These people accept their lot as from Fate.

... the teacher and those few who may share with him directly in the responsibility for education of the group, must understand what the need is, and what resources are available to meet the need. Only as the school understands or recognizes the needs can it lead the children and the community to “feel” the need. When the need is felt by the community or even by individuals in the community, something is likely to be done about it.¹²

Some of the areas of need which are very real to Williams include those connected with health and maintenance of life. He speaks of both the ignorance of the laws of hygiene, sanitation and first aid and “the ignorance which closes the mind to new and different ways of doing things. Superstition and fatalism engender the belief that illness is caused by evil spirits or is due to sins committed, and there is nothing to do but to endure.”¹³ He wishes that people might be educated to understand the relation between filth and disease and to realize the social significance of acts which cause the spread of sickness. Problems of diet, of pure food and water supply, of drainage and pest control are very real to him.

Population pressure in Bengal with its 779 people to the square mile and the correlated need for increased agricultural and industrial production, and dissemination of birth control information and practice, are vividly portrayed. Processing of raw materials, preservation of foodstuffs, and conservation of natural resources of minerals, soil, and water are important. Shelter needs, including more adequate housing, bedding, change of clothing for the wet weather, woolen garment for the cool season, foot protection, and mosquito net are shown as real needs. Housing needs to be provided, which will give adequate ventilation, protection from fire and thieves, from dampness, provide convenience for the housewife and privacy.

The function of women in the social system must become something more than that of a producer of male offspring and a servant to her “lord and master.” Much enrichment of the home and family relationship is possible. Under the head of cultural resources and needs, he calls attention to literature, music and recreational requirements and potentialities as well as those of religion. In connection with the religious needs he mentions: “reinterpretation of concepts which hinder the development of a scientific attitude toward natural phenomena; removal of restrictions subversive to

¹²Ibid., pp. 218-219.
¹³Ibid., p. 224.
human values, such as those of caste, purdah and animal worship; revision of antiquated (in the light of modern social need) religious law (making up a large part of the civil code) affecting property and other rights.”\textsuperscript{14}

It is appropriate that these suggestions as to areas of need and ways of dealing with them be compared with those of another missionary writing seven years later on the same general problems.

In Kline’s thinking the ashram was to provide a fellowship for seekers after truth—a laboratory for comparative religions; to encourage cultural fellowship and research—a laboratory for creative work in art, music and literature; to support the cultivation of the spiritual life in relation to society—a laboratory for spiritual and social technology. In connection with the latter the social survey, methods of democratic discussion, the art of questioning and the psychological interpretation of social data would be studied. The ashram’s costly features would be the extensive library, the finest equipment for taking pictures, recording, tabulating and filing sociological data and making charts.\textsuperscript{15}

Writing in 1944 on the basis of experience in western India (Berar), Kline has much to say about the value of the ashram and the rural school on wheels. There is much of value for our study in an understanding of these two proposals. He works from a premise similar to that which was given in Williams’ words above. He writes, “It is the contention of this project that rural education in India will best serve the people by a study and application of community education. That is, education which considers its very foundation to be right within the community’s life and problems themselves; and education which is willing to make its demonstration and to take its contribution right out to the people in their own immediate communities.”\textsuperscript{16}

Naturally the ashram was to be fundamentally for the growth and reinvigoration of the leaders who were seeking to bring the insights of science and religion to bear on the solution of the tensions and problems of the Indian village and would not be open to the masses. He points out that “spirituality” is a potent factor in leadership in any field in India today. This was no doubt an important element in Mahatma Gandhi’s hold on the imagination and loyalty of the Indian peasant. No one who has spent many months in close contact with the drains which come on the strength, faith and enthusiasm of any teacher, pastor, social worker, or doctor at work in India can fail to appreciate the value that periodic residence in such a fellowship of unhurried study and quest for spiritual truth and social welfare

\textsuperscript{14}Ibid., p. 317.
would bring. It seems possible that such an institution might check the all
too frequent tendency for adult literacy work and other adult education or
social welfare projects to deteriorate and even die after the first flush of
enthusiasm has worn off. Some provision must be made for the corporate
study of the problems and tensions of village-India in the light of the ad-
vances made by social science elsewhere and for the renewal both spiritual
and physical of those who will bear the brunt of leadership in the battle
against the giants of ignorance, disease, and poverty.

The rural school on wheels proposed by Kline\textsuperscript{16} was to function as part
of the training of teachers as well as a definite part of the program of adult
education. Students from the normal school would spend part of their time
working with the leaders of this school.

His division of the areas of need or problem areas is reflected in the set
up of the school. These include illiteracy, poverty, debt, ill-health and caste.
The school, therefore, has departments which concentrate on literacy and
Christian education, on agricultural demonstration, on cooperatives and
credit unions, on health and recreational units, on teacher training and mass
education and on social survey. These all contribute to the objective of
developing a sense of the equal dignity and worth of human personality
and community cooperation.

As three-quarters of the people of India are dependent directly on agri-
culture, its improvement is a primary objective. By projects which demon-
strate better methods, better seeds, better tools, by improved crops and
livestock, by the use of pictures and all the arts of visual education, by the
introduction of new crops such as the soya bean, by personal services and
county fairs, the movable school will attempt to improve the agricultural
income of the farmers.

The literacy program would use the method instituted by Dr. Frank
Laubach. It will encourage the development of suitable local libraries and
classes to make use of the newly acquired reading ability in securing other
types of knowledge needed to solve local problems. It will encourage daily
worship and the use of the simple style large print books and magazines
now being put out for newly literate adults and aid the production of other
requisite literature.

Training in the values and methods of cooperative credit, production
and marketing unions, adjusted to meet the needs of the local situation, will
be given. The guidance and experience of old well-run and established
societies will be sought in attempting to meet the credit and purchase and

\textsuperscript{16}\textit{Ibid.}, pp. 167-183.
marketing needs of the villagers. Education must be part of the program of each society so that it does not degenerate into the condition, so common in rural credit societies in India today, where loans are taken for nonproductive purposes and effort to repay is very lax. The cooperative society may serve as a central coordinating agency for all, teaching the people to buy at wholesale, sell collectively, own tools collectively, home and farm individually and to unite to educate their children.

The health and recreation program shall have a clinic with nurse or doctor present. By pictures and public address system, health ideas will be broadcast. Home and village sanitation will be demonstrated by construction of wells, draining swamps, providing for disposal of offal and refuse. Instruction in diet, clothing and housing will be given. A counseling service will be available. A trained recreation leader will introduce the use of games, pictures, drama and library.

The organization and administration of the various activities will be cared for by the Indian staff to insure, as far as possible, on-going projects. Teaching will be by the staff of the school, practice teachers from the normal school and local leaders connected with various welfare departments. Conferences of staff, students and farmers will be set up. Where the demand justifies and the need can be met village schools will be organized.

The social survey department will attempt to discover the individuality of the community, furnish material for the curriculum and take care of the tabulation and organization of data. By preliminary studies they will choose suitable locations for the movable school. They will also help in the evaluation of the work done by checking on results.

These mobile schools will stay in a community not a few days but as many months as necessary to really get effective action. Four months or longer probably will be needed in any community and even after that some follow-up will be required to keep the local organization functioning and maintain any gains made.

In this chapter we have, then, an overview of the Indian educational system as developing out of the past as a result of the pressures of on-going national life. Some insight has been gained into the thinking of government and mission authorities on how the problems may be solved and as to what the real problems are. In the following chapter, it is proposed to seek guidance for formulating a constructive program for the province of Orissa by looking into experiments and thinking in regard to education of the underprivileged in Greece, Africa, Mexico, and certain survey studies which touch projects in many lands.
IV

EDUCATION OF UNDERPRIVILEGED OUTSIDE THE UNITED STATES

It is anticipated that this section of the study will introduce us briefly to developments which have taken place in three countries and to relevant parts of certain survey studies. The first country to be dealt with is Greece and the work of the Near East Foundation as successor to the Near East Relief following World War I, when the resurgence of Turkey and the disastrous Graeco-Turkish War brought such terrific displacement of population with the driving out of the Greeks from Anatolia and Smyrna.

Greece and the Near East Foundation

In the ten years following 1928, there was built up in Greece an organization adapted to the reconstruction of village life on a fourfold front which was largely incorporated into the activities of the Greek Government as a continuing part of their national life. But for the advent of the second World War, which again devastated Greece, this must have accomplished a great deal.

An agricultural extension program was developed first. In the agricultural extension program it was settled that each of the workers should cover only six villages so that the man might spend a whole working day in each. "Our main purpose remained always the same—to demonstrate the value of carrying to the peasant who needed this information a few simple well-established facts relative to improved farming; and to demonstrate to the government an acceptable method of providing this service. But while doing all this, we needed to adjust our approach to changing conditions and, most important of all, we ourselves were constantly learning."1

The program eventually worked out for the agricultural extension worker included; part-time and evening instruction for the older school boys and young men and for adult farmers; helping the village teacher with the school garden, taking the school children on an occasional excursion, teaching natural science classes in the school; making surveys so that all efforts should be grounded in fact; establishing village committees as key men or cooperating farmers were developed; carrying on home projects with the older school boys and young men and the "cooperating" farmers; maintaining, in cooperation with the agricultural department or village, experi-

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1H. B. Allen, Come Over Into Macedonia, p. 304.
mental plots to study the suitability of various crops and practices to the particular village situation; continually growing by study of special enterprises, cooperating with recreational, sanitation, and home demonstration center’s program.

Then a recreational program was built up. During the first year it concentrated on providing reading material for a book hungry people. In order to get a library started each community must provide the necessary chairs and table and room. These small reading rooms developed into community centers. The task of collecting and selecting books on a wide variety of subjects suitable to the vocabulary and mentality of the villager was not inconsiderable. The cooperation of a wide circle of friends was enlisted to help in unearthing sufficient literature of the right type. It was necessary to put board bindings on the paper-covered volumes to protect them from the hard village use. Community responsibility must be taken for keeping the library going. A system of portable boxes of suitable size to contain about sixty books was developed. On the cover of these circulating libraries was pasted an inventory and there was a blank for keeping a record of the circulation. The task of collecting and selecting books on a wide variety of subjects suitable to the vocabulary and mentality of the villager was not inconsiderable. The cooperation of a wide circle of friends was enlisted to help in unearthing sufficient literature of the right type. It was necessary to put board bindings on the paper-covered volumes to protect them from the hard village use. Community responsibility must be taken for keeping the library going. A system of portable boxes of suitable size to contain about sixty books was developed. On the cover of these circulating libraries was pasted an inventory and there was a blank for keeping a record of the circulation. These were circulated by the agriculturist and turned over to the schoolmaster or secretary of the community. After everyone in the community who cared to do so had been given a chance to read these books, the box would be changed for another selection.

The reading rooms were used also for occasional educational talks, the showing of strip film or slides. All of these were made to include photographs of well-known local citizens of the various communities. Eventually a simple 16 mm moviescope and a few educational films were secured.

Village athletics was put on a more systematic basis. Each agriculturist was encouraged to train a small group of boys in simple athletic events that did not require much equipment and each circle of villages was encouraged to compete in athletic contests. Gradually, where the local inhabitants produced at least half the cost, playground equipment such as seesaws, swings, parallel bars, horizontal bars, climbing poles, rings, and sand boxes for small children were installed, usually in school yards.

Some means of developing local leadership for these recreational projects was necessary. An adaption of the Future Farmers of America clubs and of the Boy Scout program was worked out that seemed suitable to rural Greece. The clubs were directed by the leader of the agricultural program in each district. They formed the integrating hub of the entire recreational program.

Ibid., p. 128.
Thereafter a nurse and a home economics extension worker living together in a home demonstration center began a many sided program for children, women, and girls. The "Home Demonstration Center" was set up in the following manner: A whole house was rented in the central village typical of the homes of the area. The home was provided with a good kitchen garden, a few bees, and a small flock of good laying hens. It was provided with a sanitary latrine. The doors and windows were screened, the place was whitewashed, and the nurse and home-economics-trained workers were to maintain it as an example of neatness.

All furnishings were tasteful but consisted of items of inexpensive equipment such as found in an average village home. The home was a demonstration of the things that were being taught. Everything about the place was kept within the economic reach of the average farmer.

The living quarters were converted into a classroom and instruction proceeded during the agriculturally slack seasons. In the busy seasons the house with its yard was used for a day nursery for the children who would otherwise accompany the mothers to the fields. The two girls living together made possible what one alone could not do in such a rural situation. They shared the village life to the fullest. The summer day nurseries provided an opening wedge and taught the mothers much that was beneficial in the care of the children. Mother's classes were used to teach the women the best use of the meager facilities at their command. The curriculum was largely the outcome of the questionings of the women. While the nurse was teaching a class of mothers the Home Economics girl took the children and amused them and vice versa. The women were led to study practical aspects of the prevention of disease, child care, first aid, and home hygiene. Courses in sewing, cooking, gardening and how to manage their younger brothers and sisters were taught in classes for unmarried girls. Foods, clothing and ethical problems were discussed.

Every lesson was made as practical and graphic as possible and demonstrations were endless. No attempt was made to get young girls to do things in ways radically different from those of their mothers. Showing better ways must include understanding of the improved method and conviction of its practicality and desirability. The cooperation of the mayor, the priest, and the local schoolmaster, as key men in the community, were always sought.

On appointed days the nurse went to the schools of her own and nearby villages to teach hygiene classes and to inspect teeth, eyes, and to

examine for colds and sores, and do a little first aid. Anything serious was at once referred to the nearest physician. Girls from the upper grades were sent to the center for such home economics instruction as the curriculum could be interpreted to allow. Well-clinics for babies were eventually included in the program with activities such as these have all over the world.

In the fourth field, that of rural sanitation, it was found that there were many problems that awaited only enthusiastic, intelligent leadership to be solved. It was decided to concentrate on the simple, basic, everyday aspects which mean much to rural homes and avoid expensive projects which called for special engineering knowledge. Every project was checked to see whether or not it could be accomplished within the resources in labor and materials of the home or village for which it was designed. Some of the types of projects attempted were: those connected with water supply, both for drinking and irrigation; drainage; provision of school or home toilets of borehole or pit types; repair, disinfecting or digging of wells; malaria control; introduction of Gambusia fish; mapping of every possible breeding place of mosquitoes and spraying streams, moist grass, and stagnant water; garbage disposal; removal of manure piles; whitewashing of houses, screening of bedrooms, control of artesian wells, protection of water supply from contamination. Some of the projects involved several years of work and others but a few hours or at most days. Much was done through the help of the other three departments but the integrity, enthusiasm and attitude of real service of the leaders given special training in these matters were of vital importance.

Along with the development of these four phases of the program went a leadership training program which both developed the Grecian leaders needed of a professional type and local lay leadership within the various villages. The continual study, through survey and job analysis techniques of each village and problem, went a long way toward developing the leaders and keeping the program in vital touch with the local situation. The close coordination of the work of all five departments with each other and with all government agencies in the field was a significant feature.

Direct relief should continue for as short a time as possible. The goal was helping others to help themselves. Sharing should begin with planning and extend to giving of time, labour, materials and cash according to their ability. The development of adequately trained local leadership to replace outside supervision was a major aim. Careful exploration of local needs and problems with due respect for the experience gained wisdom of the farmer was essential. A wide range of interlocking needs was discovered.
Farm and home were parts of a single enterprise and welfare was determined not by a single factor such as physical assets but also by health, family life, attitudes and aspirations, relation with others, forms of pleasure and recreation.

Constantly maintained aims directed toward definite action produced a series of little advances related to what the peasants already knew and were doing. A policy of going slowly and making absolutely sure that changes proposed were practical and workable under local conditions paid dividends. Demonstration was the primary method. Both leader and pupil learned by tackling definite problems and doing something about them. Meeting people's needs on a service basis provided a good entering wedge but could easily absorb the total energies of the staff which should be directed toward eliminating the causes of disease, poverty or whatever the problem might be.

It was necessary for people not only to see the improved practice but also to understand it and to be convinced of its practicality and desirability. Respect and consideration shown the natural leaders or key people brought large returns in cooperation. Insights were gained through tracing the sources of popular superstitions and the needs out of which they arose. It took a combination of leadership which had gained the confidence of the people, intelligent application of scientific knowledge to local problems and hard work to bring progress. The purpose of rural reconstruction can be accomplished only on the basis of long time, intimate, personal contacts.

Mr. Allen in summing up some of the things learned in the ten years says:

We discovered, for instance, that agricultural progress among a primitive people cannot be imposed from without. It is brought about from within. Nor is it the result, in the final analysis, of big grandiose schemes or radical changes in age-old methods. It represents rather the sum total of a multitude of little improvements applied, for the most part, to the traditional enterprises.

Finally, we learned that better methods of farming for people in retarded sections of the world are not usually demonstrated on well-equipped farms by college educated, high salaried agriculturists who could not possibly hold their own in extracting a livelihood from a centuries-old soil. Instead, it is brought about by zealous agricultural leaders, perhaps these same college educated men, who carefully, patiently, and painstakingly win the confidence of their people and then induce them to accept simple but fundamental farm practices that, in their eager hands and on their own land, will result in higher production and better family incomes.

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4Ibid., pp. 266-267.
African Experiments

Dr. Albert D. Helser has built up an interesting educational program based in part on the folklore of the Bura animists. His profound conviction of the educational values of myth, legend, tradition and the folk tales of primitive people is worthy of considerable study and consideration. The proverbs, customs and mythology of a people have grown up out of needs of the past, met more or less satisfactorily by these folkways, mores and systems of belief. Insofar as this portion of the cultural heritage of a people is not unadapted to the needs of the present, use of it within the educational program makes that program more likely to be acceptable to the people and gives the teacher a valuable point of contact.

He believes that educational aims should arise out of a study of the life needs of the child and of his environment. He insists that changed ways of behaving (conduct) should be the test for learning rather than oral command of subject matter.\(^5\) The emphasis in teaching must be upon the living through of a valuable experience, rather than the mere reading about it. He calls attention to the ways in which the folklore of a people is transmitted as suggestive for educational method. The text of the narratives may be extremely important but the context or sociological reference is more important to the educator. The manner in which the story is told, the time and setting within which the performance takes place are all highly important.\(^6\)

Dr. Helser proposes setting two young couples, trained in improved techniques of living, down in a community to live as farmers with responsibility as teacher and dispenser to carry on the study of projects in home and social life, health, agriculture and livestock, and crafts. The attempt to put these leaders into a normal village relationship and make use of the contagion of example as well as precept is valuable. The process is one of grafting the new on the strong rootstock of the past that it might grow with the vitality of that root rather than attempting to uproot the old and completely replant.

Our attention was called to the value of selecting leaders where possible from the families in which leadership has traditionally rested, the chief and medicine man. Community goals were clearly defined and both the example of progressive family living and the teaching program were expected to contribute toward their attainment. The family was recognized as the first and most important educational institution.

Children learn by living and every member of the family can participate

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in a search for a more satisfactory way of life within home and society. There is danger that the farm home with its wonderful natural learning opportunities shall be so separated from the school or adult educational situation that the continuity of the learning process with life is broken. School or classroom must be seen to be part and parcel of the process of learning effective techniques for living.

Another emphasis is on the ideational as opposed to physical problems connected with health. Helser writes:

There are three battles we must fight for health among animists. The first is the battle against filth. From the day a babe is born it must meet enemies that would quickly kill a child born into a more advanced civilization. The second is the battle against fear. The life of retarded peoples is a balance between greater and lesser fears. Every fallen tree and shady nook, every peculiarly shaped stone and crooked stick harbours some force which may cripple or kill all who ignore it. The third is the battle against fate. This enemy strikes terror into the child and throws a shroud over him as soon as the little fellow can realize what his elders are talking about. Despair destroys hope and paralyzes constructive effort.

The last two of this triad, filth, fear, and fate are primarily things of the mind and the spirit rather than of the physical environment but because of their being psychological rather than physical entities are no less real or difficult to deal with.

John Dewey and John L. Childs in Progressive Education, suggest that "The deeper and more enduring education, that which shapes disposition, directs action, and conditions experience, does not come from formal educational agencies but out of the very structure and operation of institutions and social conditions..." Surely one is not warping the idea in their minds when one suggests that the informal aspects of education and the social philosophy and the needs and issues of the particular community and generation in which the education is to take place are matters that deserve the most careful attention. Helser's emphasis is at this very point.

Another educator with African experience gives the following principle and derivative subprinciples:

The basis for a sound education must be found in the life of the people themselves.

1. The educational program should attack the felt needs of the community. (Why?)
   a. No people will support a program in which they do not believe.

\[^{7}\text{Ibid., p. 166.}\]
ADULT EDUCATION PROGRAM FOR ORISSA, INDIA

b. It will insure education against a top-heavy structure.

c. The teacher cannot carry a many sided program alone and cooperation from village leaders can only be expected when they recognize the necessity.

2. The educational program should promote a consciousness of village problems.

3. The curriculum and its materials should grow out of the community and be continually drawing upon and using village life.

4. The educational program should promote (concerted coordinated) improvement in the various phases of village life.9

Mrs. Leasure goes on to indicate that “Educators must remember that the fundamental beliefs of a people are tenacious and that the material forms of culture may change without extensively affecting tribal beliefs.”10 Group responsibility is fundamental in tribal life and indeed in the life of the caste, joint-family or clan in village India. The idea of individual freedom has rapidly gained ground especially among young people. It has profound effects in relation to the home and village. Recognition of the value of individual endeavor must not blind one to the need of preserving the feeling and the reality of group responsibility.

Motivation, the outreach into systems of belief, is vital to any permanent change. Mrs. Leasure writes:

Village education will not deeply affect the lives of village people until it has awakened their deeper feelings and made them desire to change. Any educational program which lacks the means of motivating people to action will not to any great extent help the people adjust themselves to changing conditions. The education of the BaKongo people will be affected by the religious beliefs and practices of the people; the type of activities used in the educational program; the example set by the teachers, parents and leaders; the level of maturity of the particular group being educated; and the degree of dissatisfaction which is awakened with the undesirable conditions.11

That adults will usually be interested in such primitive communities, only to the extent that they can see a reason for the change in terms of practical benefits, is obvious. For making education continuous with life there is no better way than by helping the learner to do better the activities which he or she would have done anyway. Preparation for service in a community school is usually weak in that the teacher is not usually given experience in such group or community leadership in life. Most of a comprehensive community program will be outside of books and the schoolroom. “In any practical problem of education the understanding of people

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10Ibid., p. 133.
11Ibid., p. 156.
is quite as important as knowledge, since knowledge without ability to apply it to human problems is of little if any value." She says that adult education, to be effective, should be fitted into the natural setting of village life, and gives the methods suitable to adults, more or less in order of importance, as demonstration, cooperative effort, clubs, indirect instruction and direct instruction.

A dual emphasis carried through the whole school life and into adult education in alternate years was a main characteristic of her educational scheme. One year dealt with the home and how it might be improved and the second with the farm and village or community and its problems. This gave opportunity for the teacher to focus the attention of both sexes and all ages on the same problems as related to the capacities and needs of the differing age and sex groups. The place of higher-trained supervising or visiting teachers was stressed. It is axiomatic that no village program can rise higher than the abilities and interests of the teaching staff, so an important part of the job is building up local leadership.

In Africa Advancing, a study of rural education and agriculture in West Africa and the Belgian Congo, a few points are made which have not been covered in previous discussions. One of the most important is found in this observation:

. . . Public health requires the intelligent cooperation of all the people; . . . but, to achieve this, the whole population must be reached, for the majority are at the mercy of the ignorant few who do not understand and will not cooperate in necessary measures.

Nonpolitical competent leadership with long time policies looking to the stimulation of local effort by judicious use of funds was commended. Frequent or sudden changes in plan are especially disconcerting to a people whose lives have been so ruled by custom as those of the primitive rural peoples of Africa and India. Hence the necessity for long range planning.

Music, drama and religion are vital interests and must be brought into the picture. Without "spirituality" the extension worker may well be handicapped. They quote with approval from a Gold Coast Education Committee Report part of which is in turn quoted from the Report of the Oxford Conference on the Church, Community and State: "Education is the process by which the community opens its life to all individuals within it, and enables them to take their part in it." . . . native education must be based on religion . . . the essential purpose of education is to open to the citizens of

12Ibid., p. 167.
13Jackson Davis, Thomas M. Campbell, and Margaret Wrong, Africa Advancing, p. 12.
a country a life which is rooted in the unseen and eternal realities, from which all the potentialities of the child will draw the means of growth. Spirit, mind and body are all alike the concern of education."\textsuperscript{14}

The isolation of splendid pieces of important scientific research from those who need it most is a matter of comment. Translating the results of research into the practices of the people is part of the responsibility of a satisfactory extension or adult education program. The situation is best studied by trying to do something about it. Health, agriculture, forestry, and other government services as well as education departments have something to contribute. One of the more significant of these is the cooperative society. "True cooperation amounts to economic democracy, and a good cooperative society is a school for good citizens."\textsuperscript{15} These societies have a tradition of education as part of their true function. Buying and selling on a cooperative basis, and cooperative means of reducing the cost of credit have much to contribute to better living. There is real possibility in a movement for adult education through economic cooperation.

Cooperatives have great educational value in giving the people a direct share in the commercial activities which link them with the world at large. They also build up a sense of responsibility and self-discipline in applying measures agreed upon for the grading and processing of the various products.\textsuperscript{16}

Rural people the world over have much in common; they are rooted in the land, the soil and its products are of primary importance to them; life on the farm has seasonal ebb and flow. The crafts which supply their basic needs are combined with farming in the village economy. Those activities assigned in their culture to men and women will be provided for in the religious sanctions and traditions, and everything necessary to the preservation of life will be assigned to some functionary or other. Whether or not there is a written language, some method of handing down to youth the knowledge and ways of living conceived to be supremely valuable will have been organized. "Superstitions hoary with age, belief in the power of magic and in unseen forces—all are rooted in aims that are sound although they may fall short of meeting any scientific objective or test."\textsuperscript{17} Thorough understanding of the life of the people and the springs of action which drive them into doing things as they do is a fundamental of educational success.

The development of intelligent community controls and encouragements supplements the activities of more direct educational agencies and methods.

\textsuperscript{14}Ibid., p. 140.
\textsuperscript{15}Ibid., p. 126.
\textsuperscript{16}Ibid., pp. 122-123.
\textsuperscript{17}Ibid., p. 139.
Bringing community life to the point where farming is economically rewarding and the farmer's life in the village is full and interesting is the only way to lead educated rural youth back to the land. Providing training in sound practices for family units who shall go back to be local leaders and the use of a demonstration center in conferences of village leaders were also commended. Stress was laid on the importance of women and girls in an education that shall redeem family and social life.

**Mexican Revolution by Education**

A quotation from an address given by the Mexican educator, Rafael Ramirez, speaking before the Rural Seminar in Mexico on August 13, 1935, on the new Federal Rural Schools is given as an introduction to them and their methods:

> When one visits the schools and asks the teachers what they are doing, they answer with candid simplicity, "Sir, we are cultivating an orchard; we are arranging a garden; we are building an open air theater; we are undertaking a campaign against alcohol, making a chicken yard, building our school, constructing a toilet, installing baths, etc." And if one asks how they do these things, they answer with a smile, "Sir, we do them as they should be done—by doing them." And if, finally, one asks them why they make these things, they answer with surprise and banter, "What a question, Sir. Why should you have us do them? We make them, Sir, because we need them!"\(^{18}\)

It was foreseen that in a land of contrasts among widely divergent people with a totally inadequate supply of teachers trained under the new ideology that something more than an administrative setup in the capital of the country or even the capitals of the various states was needed. The rural teacher was not able without help to construct school buildings, formulate the daily program, adequately use the schoolyard for gardening, begin and carry out a system of community and adult education, and improve the sanitary and health conditions. The teacher also needed help in popularizing the new concept of education. How was this aid to be provided? The Mexican Government created a unique institution to be known as the "Cultural Mission" which has become the backbone of rural education throughout the country.

The operation of a Mission upon arrival in the spot selected for work is of interest. A rural school is chosen and the Mission makes this its headquarters for a period of about eight weeks. The school continues in session during the entire time. It becomes the informal practice or demonstration school for the institute. The first ten to fifteen days are spent in becoming

\(^{18}\)Quoted in Frederick G. Williams, *op. cit.*, pp. 69-70.
thoroughly acquainted with the total environment of the region. The
teachers of the region, leading personalities, in fact anything and everything
about the district is studied on the spot by the missioners. They improvise
a kitchen and use the school as sleeping quarters. Every effort is made to
enlist the peasant's interest in the work of the school and the Cultural
Mission. The help of the local people is secured to initiate such projects
as "the construction of a teacherage, the inauguration of a marketing associa-
tion, planning a community light plant—in fact the Cultural Mission seizes
and exploits any and all opportunities for the betterment of the commu-

[19] They seek to know and meet problems arising from the community
social and political undercurrents. They may persuade the village author-
ities to turn over the local jail for an extra classroom or transform it into
a community store.

In the short introductory period the missioners seem able to lose their
status as strangers and so adapt their dress to local custom and enter into
the confidence of officials, that they become accepted as community members.
"As they worked in the rural village, it was difficult to distinguish them from
the residents of the community."[20] They succeeded in getting the confidence
of the community to such a degree that they learned to know all the problems
and gossip of the community as a whole and those of individuals as well and
this all in the first ten or fifteen days.

After this opening period, through the cooperation of the State's
Director of Education, rural schools of the neighborhood were closed for
four to six weeks. The teachers were sent to take part in the program of
the Institute. By various means these twenty to one hundred teachers are
installed in makeshift quarters for the period of the Institute, some of them
finding shelter in the hovels and homes of the villages. The more intimate
the contact with the local people the better as it provides avenues for simple
improvements to pass over to the people as they watch the practices of the
teachers.

The staffs of those missions include: a trained educator with rural or
agricultural experience, an agriculturalist, a nurse, a social worker, a recrea-
tion leader, a musician, a carpenter and/or teachers of other crafts. Such
a group skilled in losing themselves by identification with the local villagers
in their problems and needs can do a job of community education which
includes the teacher and pupil and the adult member of the community and
even the missioner himself. It functions as an experimental agency for

[20] Ibid., p. 77.
social reconstruction and community rehabilitation, with rural villages and schools as the laboratory and with real life presenting the problems for solution. Twenty-five of these Rural Educational Missions are carrying on extension work in the Republic of Mexico today.

How do the missioners go about their tasks? Procedures at such an Institute are governed by the individual tastes, initiative, enthusiasms and leadership capacities of the missioner as he faces the peculiar problems of the local situation. Courses of an informal discussion type are often given in his or her particular field. Guidance in the cooperative pursuit of the goals at hand is the means most frequently used. The curriculum embraces the whole village life.

The social workers take groups of teachers into neighboring villages to do work of an instructive, constructive and practical nature. They bring about the organization of cooperatives. They advise and participate in improved types of farming and in the improvement of stock. Through their efforts cattle are fenced off and are no longer permitted to share homes with the villagers. Steps are taken to improve roads and irrigation ditches or to drain swampy ground. The women are given classes in sewing and other domestic arts and every effort is made to improve home facilities. If peasants come to school—so much the better. If they don't—the school will go to them, into their homes, into their kitchens, their barns and their fields.²¹

The people are taught how to express their grievances to government effectively. The nurse's group seeks out problems in health and sanitation, from better diet to better toilets, and makes every effort to induce the peasants to adopt improved practices. The mechanic with his apparatus brings both entertainment and instruction to the people and through his educational motion pictures offers effective support to the program the mission desires to have adopted. The musician extends his duties to the organizing of bands and orchestras, presentation of musical festivals, furnishing music for rhythmic physical education or dances. Regional songs and the use of musical instruments are taught. The cooperative pattern is woven into the team games and organized recreation of the promoter of physical education. Pleasure and relaxation result from the sports, plays, dances and games and competitions he puts on. The painter uses the homes of the peasants, the school, the local open air theater and the arts and crafts of the locality as a laboratory for his group learning to paint and draw and create beauty.

These groups stay long enough in a particular village and area to really accomplish significant change, though perhaps not sufficiently long to establish an on-going and self-perpetuating program. The elemental simplicity

²¹Ibid., p. 82.
with which learning processes are carried on by facing actual life problems and doing something constructive about them is refreshing after experience with the "divorced from life" academic schooling so common elsewhere. Here is education meeting human need on a broad front and in the process serving as a travelling normal school. It avoids the "doctor's visit" type of inspection so common in school supervision and leaves the teacher a heritage of community understanding and support.

A further instructive feature of Mexican education is the limitation of the number of schools and communities Federal School Inspectors are responsible for while extending the scope of their activities to a community basis. The possibilities of trucks equipped with visual aids, amplifier, rural library, first-aid kit and the like as travelling purveyors of rural culture are very great in wise and enthusiastic hands.

SURVEY STUDIES OF EXTENSION AND ADULT EDUCATION

Among the many such studies which might be consulted, it seems necessary to limit the consideration at this point to two: Farmers of the World, which is a survey of the world development of agricultural extension services, and Christian Adult Education in Rural Asia and Africa, which is a study of mission programs of adult education over a wide field. Attention will be called to only a limited number of the valuable suggestions contained in these two books with particular reference to the points at which they discuss directly Indian problems and experiments and the principles of successful work.

The task of extension is defined thus: "to help rural families apply science to the day-by-day routine of farming, homemaking, and other aspects of rural living."22 It is concerned to work with rather than for people and to help them know what to want as well as how to work out ways of satisfying reasonable wants within the ecological limits of their environment. In this program of applying the achievements of science to all aspects of rural living, we have a two-way process whereby the problems for study are derived from the people and the results of investigation communicated in such a way as to change popular practice. The most effective method of accomplishing this is "result-demonstration" which has been the basic cornerstone of extension teaching, based as it is on the use of object lessons.

Possibly the best way to summarize the conclusions of the study of extension work in various sections of the world would be to quote the ten

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principles enunciated by Charles P. Loomis in his chapter on "Extension Work in Latin America." They are given without his elaboration below:

1. Work should be started in communities where entry can be made comparatively easily.
2. Gain a thorough knowledge of the main values or pillars of the local culture before launching any program of action.
3. For demonstration purposes, choose a site that is advantageously located.
4. The needs of the whole community should be met.
5. Demonstrate the need and practicality of the new program before trying to push it.
6. Bring together in familiar environment people who already know one another.
7. Start with projects that are important to the farmer and whose importance will be easily demonstrated to him.
8. Start with what the people have.
9. Let the program evolve from the people and remain their program.
10. Utilize local leadership appropriate to the given situation.

The introduction of novel ideas, customs, practices and skills leads to cultural change. "Effective changes in culture occur slowly and any efforts threatening the established institutions which provide status and regulate human relations will be resisted." There is real danger of complete disruption and demoralization if changes of too rapid and disorganizing a nature are introduced among backward peoples. Organization and values must be continuously provided for and no changes allowed that will disintegrate these without replacing them by more workable organization and higher values. Evolutionary rather than revolutionary change which will conserve social organization and values while allowing for continuous shifts to meet changing conditions and take advantage of enlarging knowledge is sought. Evaluation of changes must be in terms of their effects on the welfare of people.

The outstanding needs of Indian farmers, as depicted at a recent conference by a group of twenty persons all of whom had spent years working in different sections of India, are as follows:

- Increase the land area under cultivation through irrigation.
- More adequate means of communication, as by improved roads, railroads, and radio.
- Reforestation by encouraging each village to plant as many trees as possible, year by year, and by protecting young trees from grazing cattle.
- Readjustment of land tenure systems in favor of the farmer.
- Discouraging absentee landlordism, as by facilitating land ownership by the farmer.

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Improvement of soil under cultivation by providing fuel to replace waste materials now used as fuel but needed for fertilizer, and through provision of commercial fertilizer.

Improvement of crops, both in quantity and quality, by the sale of young trees from controlled nurseries and the sale of improved seeds for vegetables as well as for staple crops.

Improvement of stock through loan or sale of bulls of selected breed, sale of eggs of better breeds of fowls and grading up with pure bred cocks.

More efficient use of labor and time through preparation of work schedules.

Encouragement of small industries which can be conducted profitably in a village community.

More profitable marketing, as through cooperative selling societies and by encouraging traditional weekly markets.

Reduction of indebtedness through expansion of cooperative credit societies, by increasing cash earnings, and by urging governments to make the charging of exorbitant interest rates a criminal offense.

The extension services at present being carried on by provincial and state governments in India are described as follows:

Seed stores, usually in strategically located market towns. These are used as outlets for improved strains of seed and for the sale of improved implements.

Demonstration farms, intended to encourage improved agricultural practices through example, but actually most useful in conducting varietal tests on various crops.

Veterinary service, contributing chiefly through promoting castration of scrub bulls and through combating epidemics of animal diseases.

Sponsoring co-operative societies, through government organizers who set up societies and arrange for periodic auditing of accounts.

Encouraging village industries, chiefly of a handicraft nature.

Public health services, chiefly smallpox vaccination and distribution of quinine.

The inadequacy of the extension services outlined above is widely recognized and the post-war schemes of most provinces and states provide for larger extension budgets and expect to include forestry, fisheries, and many other items not listed above.

A significant program carried on at the Martandam Y.M.C.A. Rural Reconstruction Center defined its aims as follows: "The purpose of rural reconstruction under our Association is to bring about a complete upward development towards a more abundant life for rural people, spiritually, mentally, physically, socially, and economically." This required a compre-


26Ibid., p. 67.

27Ibid., p. 67.
hensive program formulated on the basis of locally recognized needs for it. The program needed to make itself felt in agriculture, sanitation, hygiene, and cottage industries; and needed to include all age groups, castes, and creeds, and both sexes—else it would be blocked. Long time planning and building on something with which the people are already well acquainted were essential.

A factor important in extension work is a rural-biased personnel of the right type. Cooperation of representatives of all elements within the community served is vital. Simplicity and inexpensiveness of methods and projects were valued. Counsel was given that emotionally charged issues should be avoided, particularly at the beginning of work in an area; where possible, work with the family, as the essential farming unit, together with a community wide approach to problems beyond the possibility of satisfactory solution on a family unit basis, was advised.

No one who has studied the type of rural adult education known as extension work, as it functions in various parts of the world, can fail to appreciate the fact that the educative results of small changes are cumulative and that real and significant social change occurs.

One of the main chapters of the survey of *Christian Adult Education in Rural Asia and Africa* deals with the problem of making rural people literate. The handicaps of illiteracy are listed as follows:

People unable to read are dependent almost entirely on local tradition. Ignorance of the outside world makes them conservative. For want of special stimulus, mental effort becomes increasingly distasteful. They follow as closely as possible in the old, well-beaten tracks. . . .

The illiterate farmer is frequently cheated by moneylenders. He makes his mark on a document that is unintelligible to him and later finds he has pledged himself for much more than he received. He can not read government pamphlets on agriculture and health. If a Christian, he cannot read the Bible, the hymnbook, Christian literature, or other helpful material.28

For the most part, the illiterate has a sense of inferiority and frustration or handicap which may psychologically be more serious than the actual circumscribing of his effective environment caused by inability to read. Various types of reading demand different levels of skill. The value of literacy as a tool depends, not alone on degree of mastery, but also on the availability of suitable reading material. “Much of the difficulty is due to the fact that there is a comparative lack of reading material which tells people what they most want to know, which is clear and simple in style and interesting enough to hold attention.”29 And, we might add, available at

29Ibid., pp. 29-30.
prices they can afford to pay. Villages are notorious the world over for inadequate library facilities.

The peasant, though illiterate, may have an abundance of practical wisdom and shrewdness from which more educated men may well learn; or, the lack of use of mental capacity may dull original endowment until the result is obtuseness and dense ignorance. However, native shrewdness is not enough in the midst of a rapidly changing environment. The handicap of illiteracy must be overcome. The vast numbers with which one has to deal in India or China, the poverty of her people, the lack of trained teachers, the inadequacy of present school systems, poor communications, the majority of people living in villages of less than 500 population—all these factors complicate the problem of making the people literate. Naturally, such things as the many different scripts and languages, some of which are as yet unwritten, complicate both publication and teaching problems.

Three major problems of literacy are raised in the following questions: "(1) How shall we teach people to read and to retain their ability by exercise? (2) How shall we provide literature that is most needed in sufficiently simple style? (3) How shall we put this literature into the hands of those who need it most, rather than those who can pay most for it?" The answer to the first of these questions has been developed in part by Dr. James C. Yen of China, with his "Thousand Character" system, and Frank Laubach of the Philippines with his key word and phonetic approach.

Dr. Laubach stresses "the creation of a spirit of unselfish service as essential if knowledge is to be a real benefit." This and the sheer magnitude of the Indian task make him insist that pupils must be led to teach others. "Each one teach one" is the slogan of his campaign. Adults are able to learn faster than children because of the larger vocabulary they already possess. The teacher must be "sympathetic and encouraging, never asking questions which the student cannot answer." The inferiority feelings of illiterates make it all the more important that mistakes be overlooked and efforts praised. Mere memory work should be less used and reason made the basis of appeal. Brevity, interest and ease are criteria for those preparing lessons for adult use. They should teach themselves, be usable by anyone. They should be so constructed that the adult pupil can succeed from the very first in actually reading the simple material presented. New words must be presented infrequently and repeated often enough to fix them. The simplification of alphabets is necessary in many Indian

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30Ibid., p. 34.
31Ibid., p. 40.
languages. Words need to be graded as to difficulty and occurrence in
the spoken language of the villages and specialists trained to a popular
journalism suited to new literates. Laubach claims the method of love as
the central secret in teaching adults to read. Enthusiasm in combination
with love and the scientific temper can overcome many obstacles.

In Asia and Africa the literate in any one language are apt to be few
and there is little commercial inducement to write and sell books, particularly
books of the type which would serve the needs of the new semiliterate
and be within his economic reach. Only a tiny fraction of the literature
available in English is provided in most of these languages. In many, not
ten books a year are published on the average, and of those that are, few
are suitable for the barely literate. What are some of the steps in preparing
a proper literature?

The first step is to gather from conversation a list of the words the
people actually use in daily speech. Gradually more literary words
should be introduced, each repeated ten times so that it may be mas-
tered. The material, though simple in style, must not be childish; it
must appeal to adult interests, helping people to do something they
already want to do, and must be enjoyable through its similarity to
popular folk tales. It must be attractive in appearance, with clear type,
and if possible with illustrations; finally, it must be cheap enough for
poverty-stricken people to buy.32

This is far from an easy order. Production of satisfactory literature
might well be hastened by the exchange and translation of good materials
produced in one language into others. There is a real place for the publica-
tion of magazines for the barely literate with a content and vocabulary
interesting to rural people. Manifestly, practical help on real problems
issued in pamphlet form, such as are suggested by a title like “What To Do
When Baby Comes,” should be multiplied by government and private
agency, but must be kept within the language mastery of the semiliterate.

Production is not enough. Distribution of literature has even more
problems, such as bringing the material produced within the physical reach
of the villager, overcoming his “wantlessness” enough to get him to purchase
and read the books he needs and arranging the follow-up.

The weakest part of education and religious work is the lack of
follow-up. The water of countless rivers runs into the sand. From
various sections come encouraging reports of the creation and use of
local libraries. In other places it has been said that they attract no
attention except that of white ants. Local human dynamos are needed
to revitalize waning interests and stimulate further demand.33

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32Ibid., p. 46.
33Ibid., p. 52.
Visual material such as posters, films, slides, pictures and museum specimens are of great value but all of these for maximum value need the raising of antecedent question or problem and sufficient guidance in use to help the individual learn to find the answers to his queries.

Literacy, in itself, is not an end, but rather the means to a fuller, richer, happier, healthier life for the individual and his community. Hence it must go on to make possible education for health, improve standards of living, benefit social relationships, and promote character growth. Preventive medicine, with its overcoming of the disease due to carelessness, ignorance and indulgence; its immunizations; its knowledge of health laws, and those of sanitation, hygiene, and diet must benefit greatly by adequate adult education. Isolation, malnutrition, and superstition are problems which can be dealt with by intelligent use of scientific knowledge. Appalling mortality too often follows the lack of such knowledge whether of personal or of community hygiene and health needs.

In any campaign for rural health the homes must be reached, the suspicion and superstition of village people must be circumvented. Most health departments are so occupied with curative needs that they have no time for mass health education. Dr. Sailer reports some novel methods. A cholera parade was organized in Foochow with a series of floats illustrating good and bad sanitation practices, how food became infected, and safe and unsafe ways of eating melons. Students with megaphones explained the exhibits. Cheeloo University Home Economics Department carried around three cages of white rats fed on ordinary fare, on that which the more prosperous used, and on that recommended by the department. The clearly visible beneficial result of the commended diet carried conviction and changed practices.

The importance of question and answer methods among people not trained in systematic mental effort is stressed. Even pictures are hard to understand without explanation. "Dr. Fraser used a celluloid doll, called Tobias, which suffered all sorts of imaginary ailments and was treated for them. The women watched and then performed the treatment themselves." An example of such good method is given below:

Some fine looking chicken eggs belonging to the missionary were admired. The missionary asked the woman if she would like some to set and offered to boil some and send them to her. The woman objected that eggs did not hatch if boiled. They were also sure that maize would not sprout if boiled. They were ripe to accept the sug-

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34 Ibid., pp. 67-68.
35 Ibid., p. 72.
gestion that insects in clothes might be killed by boiling in water and that rags used to bind wounds should be boiled.36

The control of the acceptance of novel ideas is more largely in the hands of women than of men in rural areas, particularly as regards health, diet and the care of children. The sick who are not desperate, who are still able to move about, in many instances will not go to the hospitals or clinics available and receive treatment when they could most easily be helped. Educational alteration of the daily habits of the people must reach all the village dwellers. Ignorance, poverty, conservatism, and the "superstition, which guards against imaginary evils, while neglecting the real causes of illness"37 all constitute checks to the physically abundant life.

The Indian farmer, in common with others in Asia, for the most part, lacks economic and climatic security and sometimes political security. Capricious weather tends to produce thrift-destroying fatalism. Pests are frequently unchecked. Flood and drought join in producing recurring famine. Shrinking farms, fragmentation, and poor communications make production difficult, sale of surplus costly and capital gains which might be turned back into improvements nearly impossible. Where ninety per cent or more of the agriculturist's income is spent on staple food, rent and clothing not much will be available for improvements like drainage and irrigation. The connection between poverty, illiteracy and malnutrition is obvious. Poverty-stricken homes often require the services of the children at an early age and furnish little intellectual stimulus. Mortality is highest where incomes are lowest in most countries. Resentment against the handicaps of poverty is growing. Unequal distribution of privileges among the nations has been made vivid in the recent war.

Of the four alternatives most frequently proposed to reduce pressure on the land and consequent poverty: birth control, industrialization, letting the people die off through improper sanitation and nutrition, or helping them make the most of existing resources, the first two and the last call for educational processes that shall raise living standards. The third is not tenable. Humanity demands the education required to improve sanitation and nutrition at any cost. Many authorities admit that in the final analysis the causes of poverty are psychological and moral. The hope of changing psychological and social habits is education. Money economy as replacing barter and the exchange of services requires a great adjustment in rural living and understandings.

36Ibid., p. 72.
37Ibid., p. 75.
Economic invasion and exploitation by forces too strong for the individual villager are all too common. The peasant will accept help, we are warned, only from those he has learned to trust. The spirit of service must seek to minister, by concrete demonstrations that are convincing, to men and women content to follow traditional methods. No longer is impartation of book knowledge of primary importance but rather the introduction of such understandings and changes in conduct as shall benefit the home, conserve soil fertility, introduce the foods needed for proper diet, lead to cooperative and equitable solution of problems of production and distribution of the goods and services required for human welfare. Stewardship of God given abilities and resources and cooperation with Him in optimum use of His gifts must replace uncontrolled selfishness.

Many significant experiments are being carried on in agricultural and industrial education that contribute to this end. Experience seems to indicate that the method of showing with active participation by the learner is most effective. Cooperation providing credit, federation of small producers, expert guidance and research, cooperative supply of equipment and raw materials, and collective marketing arrangements and where possible electric power have made possible a number of village industries in China which have much to teach others in dealing with poverty.

The moral basis of cooperatives comes in for an interesting stress. The East needs new initiative but not the rugged individualism of the West. An institution which makes new combinations possible and breaks down old ones, which enlarges the circle of interest and brotherhood beyond blood relationships or caste and creates an individual who is not antisocial and morally able to cooperate with others in achieving common goals, has much to commend it. Credit cooperatives are the type most used in India. These have often come to grief for lack of competent administration, bookkeeping, the basing of loans on property rather than on character and failure to limit loans to productive purposes. The well run cooperative tends to develop character and demands personal character for success.

In the field of social relationships there is great need for adult education. An infant of the genus *homo sapiens* is not at the moment of birth human in the social sense. He becomes so through personal contacts, through learning the gestures and forms of action which we call speech. Reason, moral judgment and many other qualities are derivatives from personal intercourse. The growth which comes from sharing the lives of others may be either socially desirable or undesirable. Many of the reactions of the child are learned or accepted ready-made from the adult community,
so, educationally speaking, the adjustments of the primary unit of social organization into which man is born, the family, is of fundamental importance.

In the Oriental or patriarchal type of family the main concern of the family, clan, or caste will not be the development of the individual but the welfare of the group. Even marriage is apt to be controlled more by family interest than by any standards of personal satisfaction. Though several generations may live together around the same courtyard, the tendency toward separation in the lifetime of the parents seems to be gaining ground. Girls' education in such families will be regarded as of little value. Why go to all that expense for someone else, for she will become a member of another family upon marriage. Outward conformity is important for breach of custom might imperil the whole community. No such concern is felt toward what a man thinks, though the social system discourages independent thought and action throughout early life and even into middle age.

Rapid changes in many areas are tending to cause dislocations, a breakdown of the conventions which give stability and of ancient sanctions much faster than new ones are being built up. Abolishing unsatisfactory practices is not enough, as the whole complex of interrelationships must be adjusted to the new ways for constructive change. If it is possible to bring about orderly change on a family or community unit basis much less drastic dislocation should result.

Restrictions on individual initiative need to be slackened without unduly lessening social obligation. Too narrow social obligation must be broadened to insure that hostility to other groups and their interests does not occur. Family and community support have value which must not be destroyed while attempting to develop maximum individual powers and to promote fellowship with those outside the caste bounds.

The possibility of wholesome intercourse between the sexes and of narrowing the rift between the older and younger generations by various educational practices needs attention. Working together on cooperative projects may be a means of breaking down prejudice. Surely democratic citizenship demands adult education which shall broaden the vision to include national and international interests as well as those of the blood kin or local group.

Many social problems arise out of the need for better recreations. Leisure may be turned to educational profit by the use of dramatics, music, libraries, team games, and a wide variety of other activities. Changes in the fields related to family life and social relationships can be most effectively wrought through close and repeated contacts. A prerequisite for such contacts is the gaining of confidence or trust.
In tackling the social problems discussed, various systems of home visitation, of travelling teams of workers with health, agriculture, social work and evangelism or the like included in their responsibilities, have been proposed. Moonlight meetings for adult education have been held. An approach has been made to the family through nursery or kindergarten or other provision for the needs of the children. Clubs and classes of various kinds have been suggested. Posters and other visual aids featuring attitudes and practices which should characterize good homes and fine social relations have been tried. The essential common ingredient seems to have been a using of every legitimate means to make vivid the problem and to demonstrate a more acceptable solution than the customary one and to give guidance in achieving such a solution. The Christian Home Movements in China and India have prepared more material and suggested more ways of approaching these problems than any other with the possible exceptions of the home economics extension work or Jeanes Visiting Teachers.

J. W. D. Smith has said, "The subtle forces of community life shape the mind and character of its members far more powerfully than verbal teachings can do. Children growing up in the community unconsciously absorb its traditions, and the prevailing values and beliefs of the community mould their life and conduct."38 No one would deny that life in village India suffers from caste or class distinctions that interfere with the attainment of democratic social and political ideals, from superstitions and prejudices which limit the use of the benefits of scientific knowledge, from selfishness and a too narrow sense of social obligation and from many another character ailment passed on to youth by the older generation. Ideas that are incompatible with germ and virus theories of disease are tenacious and intertwined with religious sanctions. The tenets of religion may either aid or hamper economic well-being. Hopelessness, fear, fatalism and world weariness paralyze the concerted effort needed to overcome handicaps. An interpretation of the cause of human suffering as merited penalty for sin in this or a previous existence may cause indifference and apathy in the face of remediable conditions that would stir those with a different philosophy to action.

It would be wrong to think that peasants or city dwellers are more often moved by reason rather than emotion. Efforts to build character and change conduct must appeal to both emotion and reason and deal with systems of belief, religious ideas and rituals of the people in a constructive way. Most

men respond to the concrete and obtain through active participation in the customary practices in which others share the habits of conduct and ideas of what is worthy which they hold. Pictorial and symbolical methods are important in the ritual that forms or rather transmits the mores. Those things to which an emotional charge is attached are more apt to remain in memory. Opportunities for service and unselfish conduct both within the family circle and in community wide cooperative enterprises are important in building civic character. A group permitted to discover values for themselves, given the chance to learn by doing and by participation in worship into which the desired changes are brought is likely to move in the right directions.

George A. Coe many years ago called attention to the ways in which worship may aid in the development of Christian character and conduct:

1) It can supplant fear, worry and wearing haste with calm self-possession. 2) By reminding us of central points of view it can promote mental perspective, making things great look great, and small things look small. 3) It can include such facing of our faults as to lead to repentance and amendment of conduct. 4) It can intensify our devotion to a cause, and prevent hardships from taking on exaggerated importance. 5) It can save our goodness from over-strenuousness, over-assertiveness and angularity by making us realize how small we are and how great God is. 6) It can humanize us by fellowship with other worshippers, even those whose worship is much unlike our own, and it can unite a group in support of a cause. 7) It can include repeated or even a continuous weighing of issues and results, together with sensitiveness to new needs that arise in a changing world.\textsuperscript{39}

\textsuperscript{39}George A. Coe,\textit{ What Is Christian Education?} p. 123.
V

AMERICAN ADULT EDUCATION MEETING

RELATED NEEDS

In this chapter it will be possible to sketch briefly and take suggestions from some of the important aspects of American rural adult education. Part of the matter discussed in this chapter is drawn from the publications of various groups and some of it from the answers to a questionnaire sent out by the writer to organizations and agencies thought to be functioning in adult education which were meeting needs related to those of Indian people.

COOPERATIVE EXTENSION AND FARMER EDUCATION

The cooperative Agricultural Extension Service is probably the largest adult education service in the world. A program undertaking to bring the most needed and best available information in regard to homemaking and farming to some 5,700,000 farm families is carried on by a staff of approximately 9,000 people.

This extension service is a joint undertaking between the United States Department of Agriculture, the land-grant colleges, county governments, and in some places farm organizations of a voluntary nature.

The cooperation of the U. S. Department of Agriculture and the State College is channeled through a state director of extension. Under his general direction function the county agent leader, the home demonstration agent leader, the 4-H club leader, and the state leader of specialists; responsible to these in turn are the county agents, home demonstration agents, 4-H club agents and extension specialists employed in the various subdivisions of the state. These all have status as members of the staff of the state land-grant college.

This happy combination of teaching, research, and extension is rounded out by the relationship of the experiment stations to the colleges and to extension service. Smith-Hughes teachers often serve the wider extension program as local 4-H Club or Future Farmers of America leaders and contribute in many ways through their home projects to the total adult education.

The major problems of farmers include such things as deciding what he shall grow or adjusting production to the fluctuations of economic demand and tastes; adopting improved techniques in home and farm management; organization for effective economic and political action; maintaining fertility of the soil and increasing production. Extension started and spread
on the basis of teaching by demonstration improved farm practices always with the idea of increasing money savings or profits. Extension has branched out into economic, social, aesthetic, civic, health and recreational fields.

The extension agents attempt to encourage the widespread adoption of successful and scientifically sound agricultural practices. Increased crop yields, disease and insect control, protection of the health of farm animals and the like have been part of their work. They now include marketing, credit and management problems. Some experiments have been conducted with farm and home unit demonstrations “based upon long-time plans that cover every phase of farm living, including land use, erosion control, diversified farming, soil improvement, a more adequate family food budget, home improvements, budgets and records.”

In the beginning the emphasis in the home-demonstration department was on techniques such as sewing, repairing clothes, food preparation, and more efficient use of household equipment. Now such matters as making the home comfortable and attractive, child development, adolescent psychology, and family relationships receive as much attention. Various phases of community organization such as health, schools, citizenship, and more general economic and social problems that require community wide action are also being undertaken. The benefits of cooperative action and advice on problems connected with such group action are part of the program.

A study reported by Smith and Wilson lists the methods and percentages of practices influenced as follows: “Indirect influence 21.31, method demonstration meetings 15.18, general meetings 13.80, farm and home visits 12.34, news stories 10.27, office calls 6.73, bulletins 6.52, adult result demonstrations 4.14, junior result demonstrations 2.53, circular letters 1.53, radio 1.53, correspondence 1.23, leader-training meetings .92, extension schools .77, exhibits .61, telephone calls .38, study courses .15, and posters .04. When these are classed as to whether primarily oral, written, or objective methods, oral methods lead with a relative influence equal to 34.9 practices in 100, as compared to 23.0 for objective methods, and 18.8 for written methods. Indirect spread of practices accounts for 23.3 practices in 100.”

The author calls attention to the fact that in the case of Negro farmers 80 practices out of 100 were credited to oral and objective methods.

Those answering the portion of the questionnaire concerned with effectiveness of method ranked home visits first, method demonstrations second, the promotion of clubs, societies or co-ops third, the provision of

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visual aids fourth, extension courses fifth, general meetings sixth, conferences or short courses seventh, and publications eighth. This seems to confirm the conclusion that oral and objective methods are best, though written methods may be cheaper per practice adopted where the public is literate and interested enough to read the information made available to it. The value of the clubs seems to be confirmed by the fact that in 1940 there were 6,800 county associations to assist in program planning, 51,000 home-demonstration clubs, 2100 extension clubs for older youth and in 1943 74,813 4-H clubs and in all these clubs and associations had little short of 4,000,000 members.

The Director of Cooperative Extension Work in Agriculture and Home Economics for Texas, Ide P. Trotter, in a personal letter dated May 29th, 1946 records the judgment of those of his colleagues who spent some time in India during the war as follows:

> It is the judgment of these people that the vicious cycle of poverty and disease in India cannot be broken by separate or rather uncoordinated attack on separate problems. A program that does something with all of them simultaneously is called for.

> With respect to the question of poverty . . . India must expect to remain poor unless ways are found to raise the efficiency of human labor, which appears to be universally low, no matter what the activity in which it is employed. This would suggest an urgent need for capital goods of all sorts and for a broad program of vocational training in agriculture and the mechanical arts.

> With respect to the problem of disease . . . the place to start is in the field of nutrition and in the teaching of habits of elementary personal hygiene. Food production cannot be increased significantly . . . under present soil management practices that return no organic matter to the land. But an equally important reform is the one needed in food utilization, or in “eating habits” as we call the problem here.

> He went on to comment on the religious and occupational restraints under which adults in India live and the difficulty of getting change except in the living patterns of children in such conditions. The above observations come out of admittedly limited contact with India during war experience but they come as the judgment of a group of men trained in dealing with similar problems in the deep south of the United States.

**Intercultural and Interracial Fellowships**

The problems of intercultural, interreligious and interracial relationships are acute in India so the methods and experience of groups in the United States who are dealing with this problem should be instructive.

Aside from representation of all groups in the planning, careful study of the facts, and widespread publicity, a fourth approach was the attempt
to provide the weaker party in the tension field with a type of social service that would help to remove the handicaps and disabilities that gave excuse for feelings of superiority and contempt. The Urban League, for instance, has given much time and thought to annual vocational opportunity campaigns, to the improvement of industrial relations and employment, to housing, health, social case work, recreation and group work among Negroes. It has brought vividly before community chest groups, city councils, civic clubs and the like the needs and problems of both white and colored populations. It has provided scholarships for some 107 people to get training in social work. Seminars and conferences are conducted and an advisory service is maintained that has helped many leaders to find right solutions to race problems.

The Settlement House

The settlement or neighborhood house program is well-known. These institutions carry on local programs of community organization, education, recreation and sociability for all ages and both sexes. The majority of houses carry on comparatively little formal adult education. Perhaps their genius lies in the combination of recreation and education. A great deal of informal education goes on through participating in political and social action groups, clubs, lectures, entertainments, celebrations and the like.

Clubs, organized around some group or age interest and neighborhood common needs, give a training in association which in itself is a means of character building. Classes for the study of English or civics may be held for foreign groups leading on to naturalization. Often craft work of various types for the needs of the various sexes and age groups is developed. These are directed toward the creation of objects of a size and type desired by the participant and his family. They recognize the degree to which skill, taste and tendency awaken only after contact with material and tools. Exhibits of fine craftsmanship whether created by the participants or handed down as treasured possessions of the family are held from time to time.

It has been found that the homemakers' club, which has responsibility for the care, furnishing and use of a typical model flat under conditions as near to natural life as possible, is far more apt to engage the interest and change the practices of girls and women than the more formal types of training. In mothers' clubs and nurseries or kindergartens much of child care and management, sewing, food preparation and the like are taught by actually doing things of practical value and use. A majority interest of some of these settlement groups in recent years might be summed up under
ADULT EDUCATION PROGRAM FOR ORISSA, INDIA

the term parent education. Home visits for family counselling, method demonstrations in which parents participate, encouragement of record keeping on child growth, child study meetings and discussion groups, films, graphs, charts, mimeographed and published materials are all liberally used in these programs.

In a number of these neighborhood houses a room is set apart in which to display beautiful things both of community and outside creation. Place is provided in the program for the study of music and art and dramatics. Little theatres, choral and concert parties and clubs, organized around drawing, painting or sculpturing interests, are not rare. The values derived from these efforts, among others, are those inherent in endeavour after high quality, in the presence of groups of like-minded endeavorers and in the creation of an institution which holds a worthy and important place in the life of the community.

The settlements vary in emphasis as they try to meet the most acute needs of the particular groups with which they are working on a family or all age basis. Their social and political action groups, their study of community organization and most of all their working together on common problems lead to the building up of a real sense of community and bring the cooperation of all elements of the neighborhood. India surely needs the development of that sense of community of interest and action across caste, racial and religious barriers. It needs to overcome the poverty of cultural, recreational and social life so common in village and city tenement alike. It has much to learn in developing group action to meet health, recreational, social and economic needs on a village or regional basis rather than living in self-defeating compartments of exclusiveness with contempt or hatred directed toward all other groups. Perhaps the approach used by the settlements, in welding diversity into unity by association in study and action of an informal nature which happily combines recreation and education and leads to effective group action on common problems, approximates the one needed in India.

The Folk School

The folk school in America is as various as the communities in which these schools are located and the personalities around which they have developed. Perhaps the spirit which defines the special nature of the folk school and inspires it can well be expressed in quoting a portion of a speech by Jakob Lange at the dedication of a community room at the John C. Campbell Folk School in 1927.
It is like a mill situated at the bottom of a valley—a water-mill to be used for generating electric current. Such an electric plant is not run by currents from a central power-plant far away. It is, in fact, set in motion by the water which comes to the mill from every creek and branch in the whole valley, and its electric current generated, so to speak, by the co-operation of forces from the whole community, is sent out again to be used for heating the flatiron of the housewife and making the sitting room cozy. Such a plant I would like this School to become. The educational currents which it is to send out far over the valleys should be not only for illumination but for heating and setting in motion; for helping to create a richer and better life in all the individual homes. And all of you should feel the active force which moves the wheels of the mill, is created by the united action of all the homes which support it. Whenever this united action is strong the work of the School will be powerful and influential for the good of all of you.3

In a personal letter from Chester A. Graham the leader for a ten year period in the Ashland Folk School at Grant, Michigan, we have the following paragraph:

First you need a center or an ashram. Second, the people should feel at home in this center. The center should start unpretentiously and should be built largely by the people it is to serve. People's needs can be discovered through creative group discussion. The family unit is important and the most valuable adult education in the local community surrounding the school will be accomplished in the activities in which the whole family can participate. Discovering, encouraging and developing native craft art work is important. Demonstrations in animal husbandry and soil culture are extremely valuable if they are also practicable.

These paragraphs seem to emphasize the intimate relation which should exist between the community, its needs and the school or organization which "seeks first, in whatever it undertakes, to awaken from indifference, inspire interest, arouse initiative and lead to enlightened action."4 Attention is called to the fact that you can't make people take anything unless they want it and that such rural communities lack consciousness of their needs and possibilities.

In seeking an education that enriches country life rather than creating a hunger that can only be satisfied elsewhere, a center of community life rather than an institution is needed. Good soil and livestock practices; scientific care of forest and woodland; handicrafts which give expression to creative ability and supplement farm income; cooperatives and other group activities, social and educational, all contribute to a better life. The plant should represent nothing beyond the hope of many of the neighbors.

Ventures in bringing back soil fertility and reclaiming eroded soils, woodland management and the like should be on a scale and using methods possible to the ordinary farmer. Forge and shop should serve as avenues to widen horizons and develop skills useful on the farm. These should be made to contribute as much as possible to the cost of maintenance and upkeep and the service of the community.

Winter or slack season courses are often part of such schools. Young adults engage in the study of home life and the relationship of equals, creative recreation, informal study and discussion and consideration of country problems and possibilities. "Valuable experience is offered in dairying, woodworking, carving, ironwork, weaving, sewing, and farm and home skills." Credits are neither required nor given. Continuation of study depends as much on the pleasure which members find in their participation in class or group activities as on educational values received. Simplicity, standards adaptable to their own home use and not unattainable ideals characterized the approach. In several of the schools of this type all lived together as a family and contributed to and learned from the experience as they were able. New ways were evolved from the old by seeing and doing. Articles made were for use in their own homes. Courses beginning and centering in local conditions worked out from there to the larger world.

Methods of instruction include such things as a pioneer museum showing the development of life of the community over the years. The widest possible contacts were maintained through crafts, cooperatives, study groups, excursions, clubs, community celebrations and weekly educational movies. Every part of the day, rest and recreational periods included were made to contribute to the effort to obtain insight into the problems of living. Two of the schools reporting had homestead or land ownership projects connected with them where trained persons were given help in the problems of becoming owners of their own land and homes while remaining part of a community of friends working on common problems. General purpose cooperatives were encouraged by each school. Education was conducted by experiencing through participation in the creative activities of life.

**Workers' Education**

Organized labor has attempted to set up workers' education services in various places and has endorsed schools set up by various private groups or individuals intended to meet the needs of labor unions such as the Highlander Folk School of Monteagle, Tennessee. At Monteagle the attempt
is made to provide leadership training for union officials and to bring industrial workers and farmers closer together. Many a union in urban localities has an educational program for its members. A typical leader-training program will include such things as: steward training—the job of handling grievances: writing them up, preparing your case and presenting the grievance; union problems—developing more union leaders, building up attendance at meetings, contract study, negotiations, union administration; parliamentary law and public speaking, practice speaking, presenting ideas clearly in union meetings, rules of running a meeting, setting up committees; union history and labor economics—the story of the American Labor Movement, the fight for full employment and higher wages, how corporations and monopolies work, antiunion weapons; political action, importance of current elections, get-out-the-vote programs, setting up union and community political action programs; labor legislation, the National Labor Relations Act, Social Security Laws, State Workmen's Compensation Laws, current bills labor is interested in, antilabor legislation; public relations, working with community groups, use of the newspaper and the radio. These courses are presented to folks who are vitally concerned with the problems brought to their attention and are seeking help in organizing for effective action for the protection of their economic and political interests and effective group functioning.

In a word, the workers' education services are prepared to set up such groups for study and/or play as shall meet the actual needs of the workers, help them to recognize their own problems, do their own thinking on the basis of accurate knowledge and to develop leadership. The purposes of one such group "Georgia Workers Educational Service" are defined in a flyer put out by them as follows:

1. To bring about more effective functioning of trade union members within their respective organizations and their respective communities.
2. To develop a more intelligent appreciation of the common interests of organized labor and the community as a whole.
3. To promote better human relations within the union movement and between the unions and the general public.

In accomplishing these aims they offer the facilities of a circulating library, movies for use at the local meetings, help on planning and presenting radio programs, leadership for forums and discussions, surveys of needs in such matters as health or recreational needs of the area, help on organizing singing, painting or any other type of recreational or creative craft work desired. Institutes or conferences may be planned and the facilities of an
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educational nature of the whole region brought to bear on the solution of problems.

Through the coordination of workers' education with activities of the organizations for rural people such as the Farmer's Union they seek to make democracy function on the basis of mutual respect and understanding of the rights, interests and needs of all elements in the community. Becoming aware of problems common to a group like the small farmers or the labor union members and learning how to solve them through education the foundation is laid for new opportunities and better living conditions. In union approach to these problems there is both the advantage of the larger unit of group thinking and the possibility of effective legislative representation. Through cooperative buying and selling, purchasing and marketing power is increased to an extent that makes possible economically effective action. Yet without an understanding of effective group organization and action, without a study of the forces which are operative in the economic and political life of the locality and the nation, democratic operation of an intelligent and informed variety is impossible. This intimate relationship between education, cooperation and legislation is vital to Indian life. Developing group thinking and effective group action on common problems is essential to the functioning of the democratic way of life in India. The social, economic and political as well as educational values of working together toward well thought out common ends, are many.

LEADERSHIP EDUCATION FOR TOWN AND COUNTRY CHURCH

Almost all the leading denominations have programs of in-service training or series of conferences and institutes aimed at the development of leaders for work in town and country churches. For instance, the Home Missions Council in cooperation with the Phelps-Stokes Fund have developed a program of training for the Negro rural ministry which includes the establishment of rural church departments at ten of the leading Negro colleges, the providing of scholarships and a special training course for religious extension directors at Drew University, and the appointment and in-service training of these directors. Usually the directors have their headquarters at an institution whose resources may be used to supplement their own work in extension classes and courses. A whole series of conferences and institutes for rural pastors, rural church women and recreational leadership were held. The attempt is made, in addition to adequate training in general studies and basic theological training, to provide training in the techniques of rural rehabilitation and in agriculture, rural economic and social studies for ministers and ministerial candidates. Courses such as "The Church
and Its Community,” “Rural Sociology,” “A Rural Church Survey,” “Rural Reconstruction,” “Rural Social Agencies” and ones concerned with church finance and programs for the rural church were offered by the rural church departments.

The emphasis in the institutes was on the rural church and rural community improvement. The Christian rural home, the development of rural youth, techniques of rural living, a Christian philosophy of rural life and courses dealing with worship, the Bible and rural life and the like were included in the ministers' institutes while the women's conferences carried on courses in worship, church beautification, in home and family life, and in the part the church plays in making the rural community more livable. The whole emphasis of these meetings was on awakening the women to the needs of rural life and instructing them in ways of meeting these needs.

Extension classes were also conducted by these religious extension workers in churches, schools and homes on subjects similar to those considered at the institutes. Music and recreation, handicrafts in Christian education, productive home practices, dramatics and pageantry, introduction to mental hygiene, women's contribution to leadership, the principles of social case work, rural values; an appreciation of rural life, leadership training in religious education and a wide variety of other topics are presented through extension courses, tailored to suit the need of the local study group. Bulletins and mimeographed sheets on many subjects are published and every possible help given to the local leader in making the church the coordinating center for bringing to bear on the problems of rural life all the help provided by government, schools, social agencies and private foundations toward the solution of major rural life problems. The church is made the center for working out programs of informed and cooperative social action.

It seems reasonable to assume that adult education in India will be faced with the problem of leadership training and of developing centers which shall serve as common meeting ground for all elements within the social life of the community with a program of education, coordination, and uniting for action of a constructive nature. The value of the religious function of the church as such an agency needs to be included as far as possible in the Indian form of organization developed for this purpose.

Miscellaneous Experiments

The Tennessee Valley Authority in cooperation with local agencies has attempted to organize contiguous villages into larger economic units to support a program of education in regard to regional problems. The
interdependence of man and natural resources, the unity of natural environment and the interrelationship of natural and social environment, and the facts about basic resources are studied on a regional basis. The rhythmic cycles of nature, minerals, soils, forests, water and wildlife are studied together showing how they are interrelated for a whole river system or natural region. This education for the use of resources has a vital importance for India where, all too often, the pressures of insistent hunger cause a use of soil, forest, and other resources based on maximum immediate return with no regard for the longer future.

It is important to integrate resource education into the needs and opportunities of the local communities; research findings must be made available for educational use. Such problems as health and nutrition can also be best dealt with through securing the cooperation of all the agencies at work in a region in developing materials and in attacking the problems which careful surveys reveal. Not only are undesirable practices prevalent in the use of geographical and natural resources such as erosion, leaching, waste of timber, squandering of mineral resources and the like but also in the use of human wealth, institutions and folkways. Socially retarding traditions, conflicting folkways, petty loyalties, unnecessary and unreasonable economic and other competition, mental powers wasted because of illiteracy, physical debility caused by preventable disease, all are part of the misuse of resources which education could remedy.

The training programs of the armed forces of the United States, during the war, did much to confirm the basic principles or conditions of learning and to popularize the use of charts, pictures, film strips, talking film, records, and realistic rehearsals under simulated battle conditions. Ralph W. Tyler in a chapter in *Education for Rural America* lists the conditions of learning confirmed by war experience as follows:

1. The significance of clear or exact definition of objectives.
2. Material for training should be included only if it has a direct and significant relationship to the objective.
3. The importance of the learner's understanding the reasons for the things he is being taught.
4. The provision of many and varied opportunities for using the knowledge, skills, and abilities taught. Simulate real situations.
5. Continuous evaluation is used to identify difficulties of students, to determine strengths and to guide the training programs.
6. The primacy of motivation.  

He also calls attention to the fact that the lack of work experience and mature responsibility are distinct handicaps. The recognition of needs

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6Floyd W. Reeves, ed., *Education for Rural America*, pp. 112-114.
and the realization of individual responsibility for learning are valuable aids to quick assimilation of educational materials.

The teaching plan and job analysis technique which was perfected during the war, in the process of training a vast number of people in new skills for farm and shop, has values for adult education. In presenting this in outline form, quotation is made from a card developed by the men training farm workers, adding brief definitions of the meaning of one or two phrases used.

How to Get Ready
To Instruct Farm Boys (Farm Workers)

SELECT SUITABLE JOBS
Consider—
Jobs to be done, complexity, risk, frequency and importance.
Ability of worker or learner.

For Each Job
BREAK DOWN THE JOB
Select important steps. (Step: a logical sequence of the operation when something happens to advance the work)
Pick out key points. (Key point: anything in a step that might make or break a job, avoid injury to the worker, or make work easier to do, i.e. "knack," trick, "special timing," bit of essential information.)

PLAN INSTRUCTION
Use the other side of this card as a guide (given below)
Think through—
How you'll prepare him,
How you'll teach him,
How you'll try him out,
How you'll follow him up.

HAVE EVERYTHING READY
See that proper tools, equipment, and materials are at hand and in order.
Arrange work place for comfort and efficiency.
How to Instruct Farm Boys
(Farm Workers)

**Step 1. PREPARE THE WORKER**
- Put him at ease.
- Find out what he knows about the job.
- Explain the importance of the job.
- Get him interested in learning the job. (Show him what the thing is going to look like when you get through.)
- Place him in the correct position.

**Step 2. TEACH HIM THE JOB**
- Tell, show, illustrate, explain, and question carefully and patiently.
- Take up only one step at a time.
- Stress key points.
- Emphasize safety factors.
- Explain clearly and completely.

**Step 3. TRY HIM OUT**
- Have him do the job—guide him, if necessary.
- Have him do the job again, explaining steps, key points and safety factors.
- Ask questions and prevent errors.
- Repeat until you know he knows.

**Step 4. FOLLOW HIM UP**
- Put him to work.
- Check often—encourage questions.
- Tell him where to get help.
- Explain what to do in an emergency.

If the Worker Hasn't Learned,
the Instructor Hasn't Taught.

This technique is particularly applicable to operative jobs but can also be readily adapted to the management and decision type of job. In these one needs to analyze what information is required to make a satisfactory decision and make sure that expert knowledge is available on essential points.
The supervised practice program in projects on the home farm (real life situations) characteristic of Smith-Hughes and 4-H club teaching furnish a tie-up which carries teaching through to improved practice.

An illustration of a county-wide attack on the problems of a representative political unit through a process of adult education and enlistment of all the agencies operating in the county is given below. The University of New Mexico with the help of the Harwood Foundation, the Carnegie Corporation, and the advice of American Adult Education Association carried on a four-year project in Taos County, New Mexico, reported in *It Happened in Taos* by Dr. J. T. Reid. A careful county-wide survey was made furnishing the factual background. The proposal to organize the county so that everybody in it would be tackling the job of solving their problems cooperatively, working with the organized agencies available to assist them, was slowly brought to acceptance in the various communities through a process of visitation and local community organization. Thirty-six agencies and representatives of the thirty-one communities in the county shared in the regular monthly planning meetings by which the project operated. They secured this cooperation by the slow processes of personal visitation, "selling" the proposals to some influential individual, and his inviting into his home some of his neighbors and friends to discuss the project. If they approved the plan, each in turn would invite others of his friends and neighbors in for a similar discussion and after the ground work was done a community-wide meeting was called. With twenty-five or thirty already informed and approving community leaders present the meeting soon voiced approval of the plan and appointed official representatives to the staff. Local officers and a secretary paid a small monthly stipend from the project funds guaranteed the presence of informed agents of the project in the local community.

Problems raised by the representatives of the communities were tackled, such as: need for more irrigation water; erosion; shortage of grazing land; degenerated livestock; lack of educational facilities such as newspapers, magazines, radios, moving pictures and informed discussion; medical service inadequate and available to but a limited portion of the county. The needs listed by representatives of the various communities were tabulated and turned over to committees and boards for study and dealt with either as community projects or as county projects by representatives of appropriate agencies and communities.

A county library and visual education program was formed and a bookmobile was built on a truck chassis and used for the transportation of about
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800 books at a time. A portable moving picture machine, with screen, loudspeakers, microphone and electric generator housed in the bookmobile operated on a regular schedule of community visits and helped to get good attendance at community meetings by its added attractions. Educational film was secured from whatever source available. Agency representatives accompanied the bookmobile on its tours and presented their information and distributed materials briefly before the beginning of the moving pictures.

Cooperative economic projects were successfully undertaken, such as: repair and building concrete drops to retard the flow of water in an irrigation ditch; the formation of a soil conservation district; the purchase of grazing lands; cooperative provision of hot lunches for school children; cooperative buying of registered sires for horses; and a whole program of stock improvement. The largest project undertaken was the building of five clinics by the Taos County Cooperative Health Association and the provision of better health care through the Association's group insurance or cooperative health purchase plans.

In discussing the principles involved in setting up a coordinated program of county planning and action, Reid says: "(1) a definite, formal organization for the purpose is necessary; (2) democratic representation in the organization for all groups and communities must be provided for; (3) specific rules of procedure by which the organization will operate are essential; (4) the source or sources of financial support should be definitely determined in advance of organization; and (5) competent full-time paid employees to administer the program of the organization are indispensable to success." The organization should be a private organization really representative of the whole county and everyone in it and all the agencies functioning within it.

In many counties of the United States and in all states a public health department is functioning which carries on an educational program. One important phase of this program is the way in which they make use of the presence of some acute community need such as an epidemic of malaria or polio or whatever it be, to vivify and make real the need for the measures they are recommending. Too many adult education programs do not make sufficient use of the ebb and flow of community interests and needs to point up their instruction.

The Friends and the Brethren have instituted a type of educational project termed "Service Camps" in which a group of mature young people are brought under competent leadership into a community needing rehabilita-

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tion or some concrete services on social, economic, recreational or religious problems and learn by doing something about them. The possibilities of these camps both from the standpoint of effective character training and that of educational stimulation of the most practical nature can hardly be overestimated. How far their techniques can be copied for the use of secondary, normal school and college young people and perchance religious groups in India is an open question.

Another experiment of interest is that of providing family sized farms in connection with a school to which whole families are admitted as student farmers for periods not to exceed five years. Parents and children on admission undertake to carry out an assigned program, follow the recommended plan of farming and take certain courses. These model farms are kept up by the work of the family and provide the major part of the family income. Course of study requirements on the basis of which each family's success and progress is measured include under farming: care of farm boundary, farm crops, livestock, soils and fertilizers, gardening, fruit growing, farm mechanics and farm management; under homemaking: care of home and premises, health, foods, cooking, sanitation, home nursing, sewing, laundering, and budgeting; under citizenship: attendance at meetings, enterprise, industry, thrift, quality of workmanship, percentage of time at work, dependableness, standing of children in school, attendance at Sunday school and church. In other words the attempt is made to train the entire family in a school which gives expert guidance in actual farm and home practice and community virtues in a situation which closely simulates real life. This brief description refers to the Rabun Gap-Nacoochee School in the Blue Ridge mountains of Georgia.

The existence of numerous agencies of both private and public character in the United States, which are providing the public with disinterested scientific information on a wide variety of subjects, suggests the possibility that there exist in India a fair number of such organizations which could be induced to provide the information needed along the line of their specialties in a form that would prove both palatable and digestible for adults whose opportunities for formal education were limited.

In the next chapter the attempt is made to apply to the situation in Orissa, described in chapter two, the insights and suggestions which have grown out of the study of Indian, foreign and American educational experience made in chapters three, four and five.
VI
APPLICATION OF EXPERIENCE TO ORISSA'S EDUCATIONAL NEEDS

In this chapter it is proposed to outline the areas of need which should be included in adult education for Orissa. The basic principles and methods as they apply to the province will be briefly indicated. Problems of finance and organization will be considered. Any separation of areas of need, principles, methods, organization and finance is necessarily artificial. Only as an effective integration of these becomes possible will a workable program appear.

Areas of Adult Educational Need

In a foreword in *Applied Anthropology* for June 1943 Dr. M. L. Wilson, Director of Extension Work of the United States Department of Agriculture, writes:

> In any listing of essential human needs food comes first... The peace of the world is, can be and will be jeopardized by hungry, dissatisfied people.\(^1\)

*Agriculture, the appreciation and use of environmental resources, with its profound relationships to problems of nutrition, poverty and indebtedness must take first place in the list of areas for adult study. Orissa is more predominately rural and agricultural than the all-India average. Most of Orissa's acute economic, food, conservation, population control, and other problems depend on better farm and home practices for their solution. Agricultural extension as inclusive as that described in earlier chapters, as provided for farmers of America and other parts of the world, is considered necessary if Orissa's peasants are to attain the fuller life. A partial list of the questions which face Oriya farmers in acute form is given below: How shall we increase the area of land under cultivation by the individual farmer or intensify agriculture sufficiently to make a reasonably good living? Problems of irrigation, flood control, land use, fragmentation, fertility, control of erosion and leaching are all involved along with many others in that one question. How provide more adequate means of communication and transportation so that surplus may be economically disposed of? Radio, with market reports, refrigeration and storage problems, better roads, grading, bulk shipments, cheaper transport, lowered

spread between producer and consumer and a host of other questions for study and action arise at this point. How can we profitably carry on reforestation, protect young trees from cattle, rescue eroded lands, provide fuel and timber to meet the needs of the community so cow dung no longer is used for fuel instead of going back on the land to help maintain fertility? How may we make it easier for the farmer to own his own farm, discourage absentee landlordism and limit the wasteful payments to a more or less parasitical class of noncultivating owners? How shall we maintain and build up the fertility of the soil? How may we improve crops both in quantity and quality, secure better seed, more fruitful young trees and plants? How shall we upgrade livestock, poultry and other farm animals? How protect our farm crops and animals from disease, insects, and animal and plant pests? How can we use our time, machinery, and livestock to best advantage? What small industries can profitably process local raw materials? How can we improve our buying and selling position? How may we reduce indebtedness and obtain credit for productive purposes at reasonable cost? What portions of farming practice are based on sound principles bought by experience, and how much of it is superstition? This list of general questions and the others which arise in farming must be dealt with in terms of specific crops and situations in which the farmer realizes his acute need and interest.

*Homemaking education* in the widest sense of that term is a second field of need for which provision must be made. The potentialities of the home and family life of the province for good or ill can hardly be overestimated. Home and farm are essentially part of a single enterprise. Society depends upon the way children are brought up. The basic patterns of human living are established first and, perhaps, most firmly in the home. Skills and attitudes developed here can contribute enormously to abundant living. A multitude of small changes in the home may bring about the major adjustment the swift movement of modern life demands. The tensions between older and younger generations, the gradual slackening of the hold of joint-family living, the values of group obligation and responsibility and its dangers as compared with Western individualism have been suggested. Home demonstration techniques described in earlier chapters have included mention of many points at which change seems necessary.

Among the problems with which Oriya and other homes have to deal are: those of sexual normality and physical fitness; those of mental health and emotional stability; those connected with the home's function as both producer and consumer; those which hinge on human relationships within the family and between the family and other individuals and groups; those
connected with functional attitudes, husband, wife and children to each other, toward those outside the family circle and toward God.

Another approach to the problems of Oriya families would include such subjects as the sexual division of labor, duties and privileges; the training of children and adolescents; sex segregations; economic causes of delayed marriage; widow remarriage; child development; family and community relationships; limitation of the size of families and the spacing of children; the position of women and girls in the village and the like.

The traditional homemaking education courses include much that is applicable to village problems: studies in clothing and textiles, foods and nutrition, houseplanning and furnishing, child management and discipline, knowledge of the skills and practices connected with duties as hostess, housekeeper, laundress, cook, child director and the like. Many of the problems of hygiene, first aid, protection from flies, mosquitoes, fire and other dangers to life and property have direct connection with homemaking education, which, while unfortunately largely confined to women and girls, must be extended, especially in the Orient, to include men and boys. Ethical and attitudinal problems are very numerous in the home, and a knowledge of economic principles, gardening and other agricultural practices is important for women as well as men.

These, too, must be broken down into manageable units as: What to do when baby comes; how and why cook rice so as to obtain maximum food values; how make a sanitary latrine; etc. They must be brought up at the time when an urgent need is felt, if maximum learning is to take place. A multitude of other problems will suggest themselves to any worker trying to meet actual human needs as they arise in village life.

Third in this listing of areas of need is health and the maintenance of life. Ignorance of the laws of sanitation, of the causes of disease, of the most fundamental practices of hygiene, inadequate knowledge of the principles of diet and nutrition, causes tragic loss of life and great lowering of vitality in Orissa. The germ theory of disease is little understood. The care and feeding of the sick within economic and environmental limitations is worthy of study. Control of flies, mosquitoes and other insect pests, the animal pests and diseases which endanger human beings, problems of quarantine and immunization demand adult learning. Disposal of filth, excrement, and refuse, and the protection from contamination and adulteration of food and water supplies require attention.

Food taboos as related to malnutrition, fear, fatalism, undiscriminating equal evaluation of all life, animal worship, and folkways endangering health, such as those that often prevent the cremation of the bodies of
smallpox and cholera victims, are all problems related to health. Mental hygiene as a field of health education is almost unknown. Proper clothing for various seasons, diet that shall include balanced portions of all main food classes and be rich in vitamins and minerals while still within the family income, ventilation, adequate sleep, protection from poisonous snakes, rabies and other hazards and diseases could well be studied. Population pressures as influenced by age at marriage, birth control, spacing of children and the like are important problems. All these and many others are interrelated with poverty, agricultural practices, social customs, availability of medical care, superstitions and practices connected with childbirth and eating habits, limitations on employment and other fields which have been and will be discussed. One must begin with what the villagers have and know and the needs they feel and lead out from there. These general problems must be dealt with in terms of the specific arising needs. Moina has the itch. How can I get her well and keep the other children from getting it? Badam is three and cannot sit or walk or talk. Why, and how may he be made well and healthy like other children? Sura fell and broke his leg. What shall I do? Where can we get help? Innumerable situations arise in village life which indicate the natural point at which to begin education for health and physically abundant living.

Study of vocations, crafts, industries, occupational opportunity is essential both because not all of youth can be absorbed in agriculture and because the majority of farmers must employ the time available in slack seasons in supplemental occupations if they are to have a sufficient economic margin to build up capital goods, to increase the efficiency of labor or to contribute to the development of a richer, fuller life in the country. In India farming has from time immemorial been associated with handicrafts like weaving, metal work in brass, bellmetal and the like. Carpentry, blacksmithy, mat weaving, broom making, rope making, spinning, bullock cart driving, market gardening, basket making, bamboo and cane work, pottery, tailoring, brick making, shoe making, fishing and numerous other occupations form part-time industries in the villages which are either supplemental to farming or the main occupation with farming adding additional income to that of the main trade or occupation.

The way out of the economic impasse seems to lie in the technological training of part of the rural community for work in large scale industry. Or a better solution may lie in the organization of industrial cooperatives on the Chinese, “Gung Ho” pattern. These decentralized industries could draw on local labor's seasonal surplus, could unite a sufficient group to provide the capital for improved machines, hire design and technological
“know-how,” and a trained management. Locally available raw materials and agricultural surpluses could be processed and the added return stay in the villages.

From a recreational and cultural, as well as economic standpoint, wood carving, silver filigree work and other skills which are now declining in the face of machine competition might well be rehabilitated. A wide range of new industries and trade skills will penetrate the village in the future. Welding, motor driving and repair, well drilling and sanitary sewage disposal installation, the electrician's skills, machine shop, cycle repair, and engine driving are some in which openings are appearing in many towns and larger villages. One of the major problems here is adjusting supply of trained personnel to the demand for the particular type of services. Schools could quickly turn out more tinsmiths, for instance, than the village economy could support. Probably, the line which adult education in Orissa should take, is organizing and training those already engaged in production of certain types of commodity for more efficient production and marketing thereof. Numerous new industries such as canning, or other processing of foodstuffs, plastics, glass, pottery, and others, depending on the types of raw materials and the markets available, could be developed on a cooperative basis. Adult education is an essential part of any such development.

A fifth field in which education needs to be carried on is that of community organization, group work, and cooperative effort. While this type of study is most important for leadership education, it has been indicated that many of the problems which confront people in the modern world can be solved only as they learn to organize and function as study and action groups. Cooperation may give sufficient strength to the little man so that united with others he is able to meet the pressures of other economic, political and social forces.

Customary social groupings and forms of dealing one with another are important for any program of social advance. In Orissa a knowledge of the panchayat or village council of elders, the caste, the joint-family, the jajmani system, insofar as it is still operative, and the various other religious, tribal and community organizations, or valences which operate in rural communities, is essential for effective leadership and desirable for all. Informal groups, clubs, and associations have been very fruitful. Study of the forces which produce social groups and their processes and products would lead into an appreciation of the creative possibilities of group thinking in fields of education and guidance. Modified Future Farmers of America clubs proved the integrating center of the recreational program in Greece. Mothers' clubs, 4-H clubs and a host of formal and informal
organizations of people in scouting, guilds, cooperatives and other special
interest groups have contributed to the advancement of the program of
education and the integration of local practice with what modern science
has found to contribute to happier homes, healthier bodies, better agricul-
ture, and more wholesome individual and group life.

Cooperation in India has failed to achieve results comparable to those
achieved in Scandinavian countries, largely through the neglect of systematic
education in the principles of cooperation and the continuous study of
common problems by the group who are working together as a credit union,
or in some other type of cooperative relationship. Many important fields
of cooperative endeavor remain virtually untouched. Producers and mar-
keting cooperatives are few in number. Consumers and utility coopera-
tives are yet to be widely developed. Insurance, transportation, special
service types, as those providing medical aid, irrigation, malarial control
and the like have great value for Orissa.

The possibilities of group work, cooperation and new forms of com-
munity organization contributing to the growth of democratic controls and
sentiments are immense. Perhaps no other force will do as much to over-
come the disadvantages of the caste system against which the leaders of
modern India have set their faces. Dr. Wiser as quoted in Williams sum-
marized these disadvantages as follows:

1. It segments society into divisions by birth and does not take into
account individual differences. A sweeper of high intelligence must
remain a sweeper and assume that he is a different creature from the
Brahmin who may have a moron's intellect.
2. Its hierarchy fixes the Brahmin at the social apex and the un-
touchable at the base. Here, regardless of native ability, the low caste
must make the most of his status. This works toward a philosophy of
fatalism and resigned discouragement.
3. Food taboos and pollution by touch prevent dining together, and
a free intercourse of human beings who may be intellectually equal.
Taboos on certain articles of food such as meat, also rob people of
needed elements of nutrition.
4. Its civil and religious disabilities prevent men of all castes from
mixing freely in the use of public services.
5. Its lack of choice of occupations takes no cognizance of potential
skills of various kinds in a given caste, but arbitrarily fixes the occu-
pational status of each according to birth.
6. Its marriage restrictions prevent intermarriage on the basis of
intellectual equality.
7. It prevents the formation of a national unity.2

Democracy demands social mobility and leadership based on service
to the community rather than the accident of birth. Experiences in democratic

2Frederick G. Williams, op. cit., p. 308.
processes are given by group work. Cooperative effort may provide many of the protective services required by village India. Protection of the fields against thieves at harvest time, fire brigades, campaigns to control monkeys, termites, rats, snakes, wild animals and the like may best be dealt with by corporate action.

Religion is used as the generic term which best describes the sixth field of major interest. Character education, the development of the scientific attitude, the overcoming of superstition and the control of individual and group selfishness are part of what is included in this term. Izzat or pride is one of the giants which must be attacked. Those forces which cause class, caste, and racial feeling must be replaced by ideals of brotherhood, democracy and mutual obligation. Removal of all the restrictions which are subversive to human values is needed. Religious law must be reformed in accord with modern social need. Social change can thrive only if based on a satisfactory foundation system of belief.

Spiritual growth does not take place in a vacuum. We never really know a thing until it has been put to use. These attitudinal changes must become operative in all sorts of relationships, social, economic, political and religious, before they are established as changes in dispositions and practice of a more or less permanent nature that shall promote harmonious and rich life in the villages. Our experience with Christianity at work in the lives of the villagers has shown its ability to release from fear of evil spirits, to deepen and widen the demand for unity and brotherhood, to bring devotion to a God who desires righteousness and mercy rather than external rites, whose consistent loving justice and forgiveness calls forth cooperation and makes the universe our Father's world, instead of a place from which escape is desired. Release from the burden of world weariness and fatalism is important. Indifference to the welfare of others who are suffering as a result of the sins of this or a past life and negative noninjury may give place to an active outreaching love and service. The values of group and individual worship, of ritual and the emotional setting of religious instruction have been noted.

The possibility that certain types of religious organization such as the rural church in America might serve as integrator and motivator for the total community program was suggested. Men's conception of the character of the supernatural is probably the most determinative idea in their outlook on life. That events are controlled in any sense by natural law or an inner necessity of cause and effect is outside the thinking of the primitive. The powers which affect human welfare are mysterious, capricious and
often threatening in the eyes of many an Indian villager as to myriads of men the world over. The social and recreational values of the rites, ceremonies and festivals of religious origin must not be forgotten.

Reform movements have from time immemorial derived much strength from selecting from sacred lore those items which gave support and confirmation to the changes considered necessary. This process is going on today in all the religions living in India and can be of use in this program of adult education. Many of the techniques of religious education are adaptable to our purpose. Religious drama, musical and metrical presentation, the professional story teller or reciter, reading aloud from the sacred books, the use of symbolism and religious societies or cells are typical examples.

The seventh place is given to recreation and the enrichment of leisure. Both joy and enlightenment might be secured from activities within the limits of time and energy and even finance now wasted. Certain recreational practices are definitely detrimental and for these constructive substitutes can be developed. In the preceding chapters we found activities along this line including organized athletic teams, group games, playground equipment, music parties, group singing, development of library facilities and reading rooms, art and handicraft clubs, dances, forums and both formal and informal study clubs. Educational movies and other projected pictures, exhibits, excursions, drama and fellowship in taking meals or refreshments together, were all used. The happy combination of recreation and education was frequently seen. A mind confined almost literally to the four mud walls of the home and to such tidbits of village gossip and slander as may be brought in, is poverty stricken indeed. The release from tensions and from the weariness of grinding toil which right use of leisure can bring is so valuable that Orissa cannot afford to let her people miss it.

Most Indian villages have little facilities for team games, little or nothing in the line of playground equipment. Many have no hall or club room, where group meetings may be held for recreational purposes. Libraries are almost nonexistent. Developments such as those suggested in the Taos County or Near East Foundation program are perfectly possible in India. Training in library science and in the techniques of getting literature before the public, organizing reading and study clubs and the like has been very nearly nil in India. Most schools, and nearly every district headquarters have libraries. The number of volumes is few. The use of even these is severely limited both by confining them to pupils in the school or to headquarters staff or officers' clubs, and by lack of publicizing the materials that are available.
Organizations such as Boy Scouts, Girl Guides, the Junior Red Cross, the Hindustan Scouts, Bengal Bratacharis and such adaptations thereof as seem most valuable for rural school and out-of-school youth can make a real contribution in the fields of physical education and recreation. Indian lathi or stick play, wrestling, folk dances and indigenous games are valuable and on the whole less expensive than volleyball, cricket, hockey and the like. Team games, however, have great value in developing sportsmanship and ability to work together. Enlisting adults in something more than "spectator" amusements requires special attention.

There is a place for withdrawal, prayer and worship, leisure amid beautiful surroundings, developing appreciations of natural beauty as well as for opportunities for excitement, companionship and self-expression. Banquets, festivals, exhibits, excursions, competitions, museums, nature study, and community singing all have their recreative values. Some organization within the community will need to be developed which will furnish the integrating center for such recreational and leisure activities as we have been describing. Special attention will need to be given to insuring that women and girls are adequately provided for at this point as there is little tradition of recreation for them in Indian village life. Leadership training institutes are greatly needed for without guidance many groups fail to function effectively.

An eighth area of study may be called training for literacy or in the tools of learning. These are in a measure prerequisites to the learning discussed above. They are placed thus far along in the list to emphasize the fact that they function as means to learning rather than ends in themselves. These tools will vary somewhat to meet the needs of particular groups and vocations. Each vocation has, for instance, its specialized vocabulary and requires different skills or degrees of mastery in such things as arithmetic and drawing. The fundamental or tool subjects will include aside from the ability to read and write the dominant language of the area the understanding of other forms of graphic representation. It includes ability to use the resources available to the community in solving problems, to participate constructively in the various types of group thinking, such as panels, forums and discussions. Elementary understanding of mathematics with reference to rent receipts and market and bazaar transactions, are the mathematics with which the peasant comes in frequent contact. Techniques of accurate observation and the use of tools and measures appropriate to his life needs are included under the heading Tools of Learning. His needs both as producer and consumer should be included in these learnings.
Attention has been called to the fact that Orissa is only 14.1 per cent literate and the Orissa States but 8.8 per cent. The Sargent Report contemplates changing that situation in twenty-five years. Meanwhile the cooperation of every agency is required. Many practical difficulties must be ironed out. For instance, the Oriya language has some fifty letters aside from the confusion made by the signs for various vowel sounds added to the consonants and the method of eliminating the inherent short u sound with which each consonant is pronounced by splicing parts of two letters making a conjunct which is fully as difficult as the original letter to learn. Then written and printed forms of certain letters are quite different. Altogether to read fluently the illiterate must master between 150 and 200 forms. Yet studies have shown that some fifteen letters represent 75 per cent of common usage. Little effort has yet been made to publish these studies or to publish material which makes use of the relative frequency of use of certain letters as compared to others in teaching adults to read.

Simplification of the alphabet is altogether possible as has been proved by the adoption by the revision committee of the Indian Congress of a simplified Hindi alphabet on March 14th, 1937. Chinese adoption of a simplified phonetic script is another illustration. Very considerable simplification of the Oriya alphabet could be accomplished by the adoption of a simple sign such as one of the diacritical markings used to indicate differences in pronunciation of English vowels to be added to the ten consonants which now have aspirated twin separate letters. The same sign could be used with each of the ten separate letters to indicate aspiration or a push of the breath after the sound of the letter. Similarly such a device could be used to differentiate between the five long and five short vowels commonly used reducing their number from ten to five plus the common symbol for lengthening them. The so-called cerebral or palatal letters might similarly be differentiated from the dental, further reducing the number of new letters to be learned. Admittedly such alphabet simplification does not permit the new literate to read books already printed but the advantages far outweigh the temporary drawbacks to such a change.

The Utkal Christian Council, through the cooperation of the Adult Literacy and Christian Literature Committees, has carried on an extensive study of the vocabulary common to illiterates and semiliterates in all parts of the province. This vocabulary study should be published and its tentative results checked on a much broader basis than was possible in the original study. Meanwhile an attempt should be made to use these tentative results

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3Frank C. Laubach, Toward a Literate World, p. 97.
in the publication of all literature intended for adult education and particularly for the use of semiliterates. It was found, for instance, that as many as 178 words used on two pages of the standard Oriya Bible were not known to these semiliterates.

At present no center for the training of teachers is providing any special guidance in the specialized techniques of either teaching adults or preparing material for their use.* No attempt has been made to coordinate the preparation of the bulletins and reports issued by agriculture, veterinary, forestry, health, or other departments with the needs of adult education.

Turning to the other phases of the field of tool subjects or fundamentals, conscious attention to the development of these skills when the need for them arises in the cooperative society, the Indian adaptation of the Future Farmers of America clubs and the like with simple in-service training, like the institutes conducted for officers of cooperative societies in America or the educative programs in record keeping in 4-H clubs, will bring the learning into a facilitating natural and motivated situation. Only the most practical materials prepared on the basis of studies of actual rural needs and uses will be of value here. Both group thinking and mathematical usage lend themselves to teaching in actual life situations.

The ninth area which must be included in an adequate adult education program is described under the heading common learnings, civic education and general information. National and provincial unity depends in some degree on a shared experience of the common history and cultural inheritance. As potential citizens of a democracy they have both rights and responsibilities and need to know how to secure and exercise them. Education of adults should provide some protection against propaganda, exploitation and demagoguery. The constructive use of voting power to control the political life of the province and nation, not for narrow selfish interest but for maximum social and international welfare, is a result of training and experience.

Into what areas of inquiry the curiosity of awakened village minds may lead is impossible to predict. It would be tragic if the released mental power of the villager could not find help and guidance as the vistas of the larger world invited it into ever-widening fields of study and adventure. It is at this point that a library service of the most progressive type as opposed to a mere repository of books could make most valuable contribution. It should include not merely books, but pictures, models, exhibits,

*Editor's Note. By 1950 the Central Government had taken steps toward starting a system of adult education and had made some provision to train teachers for the system.
films, specimens, slides, charts, recordings and all the varied instruments of audio-visual education and constantly seek opportunities to take these out to the people where they live. Leadership for forums, classes, discussions might be secured through such a library service.

Orissa is justly proud of her cultural and historical heritage. Both its past and present problems need to be understood to make the activities of these adults who exercise the franchise such that it will have a glorious and fruitful future. The experience of the functioning of democracy in a variety of social, economic and political organizations of village and thana or taluk form the best basis for intelligent participation in district and provincial political life. Union boards, cooperative societies, health and sanitation associations, athletic teams, school and village welfare committees and other organizations functioning democratically form the best training ground for leadership growth and development.

The tenth and eleventh areas suggested for study are in a sense outside of the adult education program though they are urgently required by it. Without a division of survey, research and evaluation the whole program might bog down and fail to meet the real needs of adults in the province. It would become as so many other schemes have become, an armchair affair made up by someone whose contacts with the village and understanding of rural life were too limited to be practical. Social, educational and physical scientists have developed tools in this field which speed the discovery of points of difficulty and the solution of problems. An approach which, refusing to confine itself to the theoretical demands, results in terms of changed practices and improved community living must provide for evaluation. A frequently repeated study that shall be more than “guestimation” of real needs, situations and results and have power to revise programs and methods is essential. Survey and evaluation must answer questions such as: How many have learned to read? What farm practices have been changed and how did the change come about? What library facilities have become available to the village? Are fewer babies dying? Has the cooperative committee given protection to members’ interests? What village recreation has been organized? Are there more and bigger windows in the new homes being built? Which villages have protected their drinking water supply? Research must help to give the answers that villagers themselves are unable to supply and find ever better ways to accomplish constructive change.

Much of this evaluation may be done by the workers themselves and the habit of checking results and of analytical observation must be developed.
in both volunteer and paid leaders. Some phases of survey and evaluation must be left to scientifically trained supervisory staff. Research problems will be raised by all and referred to appropriate departments. Some answers may be furnished by agricultural experiment stations, others by the veterinary department, still others by health laboratories and food technologists. Some means is essential whereby the problems of the villager may be brought to the attention of the research specialist and his answers conveyed in understandable terms back to the villager. His habit of writing in scientific terminology to be read only by fellow scientists will need to be broken.

Finally no program of adult education would be complete without provision of leadership education. Professional training and maintenance and improvement of leadership skills by refresher, in-service and supervisory programs are necessary. Growing local leaders for such a program is no small task. Indian village life is not as rich in local informal organizations and clubs in which leadership experience can be given and capacities developed as that of some other countries. However, the enrichment of village life which such a program of adult education, as is envisaged in this study, calls for, would provide a greatly increased number of committees, clubs, and associations of various types within which such abilities might be exercised.

In starting a venture as new as a comprehensive program of adult education is to India, while some people with agricultural, home economics, public health, social work, recreational leadership, musical and fine arts, library and craft training, and rural educational training may be found, much reliance will have to be placed upon a process of learning by tackling definite rural adult problems and by conferences and institutes wherein these workers will be able to call on the help of experts in various fields to supplement the results of their critical study and evaluation of their own work.

Dr. M. L. Wilson writes: "...human factors, providing what we call the cultural climate, are as important to know as are the soil, moisture, and seasonal rhythm of the physical climate."\(^4\) Strangely enough many of the better-educated Oriya young people have become so divorced from the life of the isolated rural communities and backward and scheduled caste, or less privileged castes and classes, that they are just as truly foreigners as those that come from America or Britain with the further disadvantage of not realizing that their experience is largely foreign to that of these less fortunate fellow countrymen. Those who come from homes of wealth

\(^4\)M. L. Wilson, *op. cit.*, p. 2.
or at least comfort and social and cultural status, as do many of the student class, have little conception of the handicaps of the illiterate:

Bills of sale, rental contracts, post office and bank dealings, purchase of railway tickets, government and police rules, health measures, traffic and travel regulations and agricultural improvements all are as a sealed book to the man who cannot read except through an intermediary. He can take advantage of few of the facilities for self-improvement that Government or the Mission offer.5

He must wait for someone from the outside to come and read and explain. The high caste student dares to take new paths. The villager grows up in fear of the landlord, of the moneylender, of evil spirits and godlings supposed to be the source of sickness and death.6 The villager dares not break from tradition lest he offend one of these, and punishment descend upon him. The student, born into a ruling or priestly caste, thinks for himself and makes plans. The illiterate rustic follows the orders of others. The student, too, is likely to have become urban rather than rural minded. Either village leaders will have to be grown within the village environment or those who are selected for leadership must learn to so identify with the isolated farmer that they can truly understand and respect him. Probably both leaders of wider contacts and those trained within rural biased situations will be required. Dr. Wilson in the same article continues:

. . . understanding of resistances, customs, and value patterns is a first in any program . . . if different results are desired, new relationships and new motivations must be provided. In many instances such change can be effected within existing organization by diverting to a new and added function. However, the machinery may be so ill-adapted to change or so bound up with conflict, rivalry, or class consciousness that only a new organizational scheme will permit the necessary new relationships to be established.7

Such sociological, psychological and anthropological understanding is developed more by field and case study than by theoretical classroom work though guidance is needed. The cooperative way of life may furnish the new pattern of relationship needed and the streams of new life coming from resurgent nationalism and the Indian renaissance the motivations.

In the discussions of the preceding chapters on visiting teachers, traveling normal schools, the promotion of clubs, conferences, institutes and other group organizations giving leadership experience, some suggestions have been given of the ways in which leadership training may be carried out.

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5J. Merle Davis, The Economic and Social Environment of the Younger Churches, p. 86.
6Cf. William H. Wiser and Charlotte I. Wiser, For All of Life, pp. 6, 7.
7M. L. Wilson, op. cit., p. 2.
The provision of scholarships or fellowships for special study, service camps where real problems were tackled under expert guidance were other means suggested. The ashram, as adapted by Kline to the needs of leadership training and described in chapter three seems a peculiarly important supplement to more formal training institutions such as normal schools, those of nursing and public health, those for social work, recreational leadership and the like at present available. Its spiritual values, its library facilities and its technological laboratories would be of great value in restoring strength and enthusiasm, in keeping love and scientific method working as effective team-mates in solving social problems.

In listing eleven areas of educational need: agriculture or the appreciation and use of environmental resources; homemaking education; health and the maintenance of life; vocations, crafts, industries and occupational opportunity; community organization, group work, and cooperative effort; religion, character education, scientific attitude, and brotherhood; recreation and the enrichment of leisure; literacy and the fundamentals or tools of learning; common learnings, civic education and general information; survey, research and evaluation; and leadership education, no attempt has been made to tabulate them in the order of their importance, nor has it been practicable to make a curriculum or course of study for each field.

Education is here conceived as social guidance. The guidance of some outside agency, determining in advance the direction which education shall take, is not contemplated. It is rather a cooperative undertaking in which the people are organized for study and action in meeting acutely felt need. They are helped to such portions of the experience of the race as seem most applicable to their particular problem. The program develops as one need leads into another by the planning and action of the group itself. It is directed toward optimum social welfare. It progresses by the adoption one by one of a multitude of small changes and improved practices. These in their sum should amount to a balanced evolutionary adjustment to the shifting circumstances of community environment.

Job analysis techniques are applied to the study of particular enterprises and problems. These are broken down into a series of smaller steps or units progressively attainable by country people as they work as individuals and groups to solve their problems. Education is conceived in terms of growth and life. It must therefore cover every phase of necessary life experience. It deals with these more or less in the order in which they are brought to urgent individual and community attention by the movement and shifting stresses of life itself.
Not only knowledge, habits and skills should be sought but also appreciations, ideals, attitudes or dispositions need to be achieved. These, too, must be reduced to units of manageable size and specificity. One learns to milk cows in general by milking "Daisy." The generalizations called traits, ideals, appreciations and attitudes are usually the product not of one but of numerous emotionally toned individual experiences. The principles and methods of adult education call for separate discussion.

**Consideration of Basic Principles and Methods**

Adults are not simply grown-up children. Their interests differ. The only compulsion which holds them in the school or class or demonstration is the sense of pleasure, profit and progress they receive. They are more easily discouraged. Encouragement and maintaining interest are essential to keep older people learning. This does not mean to say that the fundamental laws of learning do not apply to adults as well as to children. The adult needs to clearly understand that he has a purpose or interest which is at stake in the learning. If he or she clearly feels the need of the particular learning toward which his activity is directed and sees its relation to his own life problems, interest will be present. Humor, a sense of progress, appeals to natural or basic impulses, and the connection of the thought to things in which the individual or group is keenly interested are helps in holding adult interest. The attitude of the teacher is fundamental in his relationship with the adult learner. The relationship between pupil and teacher must be one of equality and friendship. Radiant confidence in the pupil's ability to learn, loving encouragement at all points of success and the most tactful and face saving correction where mistakes occur are invaluable.

Adults are not quite as flexible and adaptable as children. They do not willingly change their habits of thinking. They are more critical because of broader experience. They are prone to demand more immediate results and need more continuous and longer demonstration of results. The adult is less amenable to dogmatic approach and more inclined to apply whatever is taught to himself and his own situation. Lecture methods, unless special care is taken to insure continuous attention and real thinking on the part of the auditors, are not likely to succeed very well. Group thinking methods and techniques which demand active participation are likely to be more effective.

Learning how to learn, how to think, how to understand the world about them and how to come to active grips with its issues, personal and social, is more important than any particular problem and its solution. Ideas
are built basically out of one’s own firsthand experiences. The teacher’s art includes leading the adult to test tentative formulations and suggesting items of experience overlooked, helping him to discover how to reach the goal and what the goal really is. The identification of what leads to what, whether it be to success or failure, is part of the teacher’s contribution to learning. Providing opportunity for repeated distributed use of the new skill, information or attitude is an important function of the teacher.

To paraphrase Kilpatrick8 and Williams9 we may say that education is concerned to get going in adults such activities as evoke work with an interested will, lie along the lines of their needs and abilities while beginning and remaining within the adults interest, still always reaching out beyond past achievement and being socially significant. The main objects of study shall be the needs of men and the resources available to meet those needs.

In “The Christian Mission Among Rural People” the following fundamental emphases in adult education are suggested:

1. Use every avenue of approach—eye, ear, hands, imagination, sense of humor—in combination for the greatest impression.
2. Get action. People learn through doing. Make the action cooperative wherever possible. Do not attempt to teach that which you cannot do yourself.
3. An ounce of demonstration is worth a pound of explanation, particularly when the demonstration is by the people themselves.
4. Work intensively in a small area until methods are tested, then expand the work to a larger area.
5. Put as much fun into the process as possible.
6. Proceed from the familiar to the unfamiliar.
7. In discussion try to agree and modify rather than disagree and argue.
8. Seek development of the present culture of the neighborhood rather than attempt radical substitution.
9. Give major attention to meeting the problems of the neighborhood as a whole.10

That the above tested principles apply to work in Orissa as well as elsewhere is evident to every educator. In preceding chapters a considerable number of others were presented. Some of these which are felt to apply to the program for Orissa are listed below:

10. Begin with felt needs, thus gaining cooperation, enlarging ability and vision as these are successfully tackled by united effort.
11. Wherever possible, help folks to help themselves rather than doing for them. This is accomplished through discussion, demonstration and advice as you and they struggle together with the problems.

8William H. Kilpatrick, Foundations of Method, p. 150.
9Frederick G. Williams, op. cit., p. 84.
12. Begin with simple projects which seem important to many and can be easily demonstrated. Success in these encourages and gives confidence to tackle more difficult ones.

13. The cooperation, coordination and integration of the work of all agencies and organizations working in the area is essential.

14. Farming and many of life's activities are based on the family unit. Hence, dealing with persons as families, rather than merely as individuals, is important.

15. Balance is needed. As far as possible the eleven fields suggested earlier in this chapter should be carried forward together or in an alternation of stress that makes balanced evolutionary progress possible.

16. Each problem should be broken up into short units which make it possible for the attainment of immediate goals at frequent intervals. Achievement days and other methods of recording progress, renewing faith and enthusiasm are important.

17. Frequent clear statement of both ultimate and intervening objectives helps progress.

18. Work with the poorest in the knowledge that those better off will be more able and willing to copy the poor than poverty stricken people are to copy the relatively wealthy.

19. The young may be more ready to accept new ideas but care must be taken to carry the older generation along with them so parents will allow the testing out of the new patterns.

20. Make maximum use of every support systems of belief, folkways, mores, proverbs, and mythology will give to the new ways. Show discriminating appreciation of the old and how the new fulfills its ideals and purposes more adequately.

21. Close repeated contacts between trusted, trained leaders and the people over relatively long periods are necessary to overcome conservatism.

22. Make vivid what the problem really is, demonstrate or better yet persuade local leaders to demonstrate a more satisfactory solution. Make sure that others see the cause and effect relationships involved and are moved to try the improved practices.

23. Bringing people together in groups who already know each other in familiar environment when presenting and seeking support for a program has a great advantage. New ideas suggested and approved among familiar people and in familiar environments are not so frightening.

24. Make use of the opportunities given by the local culture to further ideas and purposes evolved. Use indigenous methods: The trained reciter, the story teller, the dramatic party, the drummer-anouncer, the local festival, etc.

25. Make each meeting or phase of the program point up to some specific action, some definite improved practice.

26. Continuous survey and evaluation is essential to reveal strengths and weaknesses and guide further study and action.

27. Respect and use the experience bought wisdom of the best farmers and build on it.

28. Take adequate notice of matters of role and status. Give respect, credit and honor where it is due. Secure, as far as possible, the cooperation of the natural leaders of the community.
The foregoing principles are more or less axiomatic. The discussion of previous chapters has emphasized many of them. That they apply to Orissa as well as other countries no one who has attempted to secure social change there will deny. These statements of principle suggest something of method also. More specific suggestions of the means of adult education in Orissa are given below.

Butterfield in *The Rural Mission of the Church in Eastern Asia* says:

> Visual education plays a larger part in Western life than we are conscious of, but in mass education it is the tool of first importance, extremely useful in continuing education for literates and almost indispensable in the case of illiterates. The stereoptican, the motion picture, the exhibit, the agricultural fair, the demonstration, these devices (are) good anywhere in education.¹¹

In the first principle listed above it was suggested that every avenue of approach, eye, ear, hands, imagination, humor, individually and in combination be used. Education is in a very real sense essentially the acquiring of new ways of seeing the world. The insights of artist and scientist are due to their novel ways of observing phenomena. The printed page, pictures, magic lantern, cinema, demonstrations and exhibits appeal to the eye. Dramatic presentation, radio, classes, lectures and other modes of oral expression appeal to the ear or to both eye and ear.

Demonstrations may concern a wide variety of things and be short or long. Improved farm implements, how to build an improved stove, how to prepare soy bean milk or to plant a tree may take but a short time, while field plots where the value of improved seed or methods of cultivation are shown and explained may take as long as is required for the crop or several crops to grow. Demonstrations may be given in field, or window, or market, or public building. Days or meetings for demonstrations of particular things may be held. They may show the results of certain practices or the methods of doing certain things. The learner may participate in the demonstration. For the villager repeated demonstration with careful explanation of key points and opportunity to attempt the improved practice himself under guidance can hardly be equalled as an educational device.

Trail-side museums, such as those carried from place to place in the United States by such institutions as Tuskegee Institute, are of great value. The museum ceases to be a mere repository and goes out to the people with planned exhibits and guided lectures and helps for study groups. Museums might be built up in connection with schools or community club

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houses. Many extension departments have libraries of films, of slides, of books and of specimens which are available for the use of study groups. These departments are prepared to give study guides and help groups organize classes on a wide variety of subjects. Many will furnish lecturers or discussion leaders at little or nominal cost. Surely some of these methods might be well used in Orissa by health, agricultural and education departments. Reading aloud from sacred books of an evening is often done in village India. Someone so appointed to read aloud other materials at specified places and times might reach many who could not read for themselves. Discussion often follows such reading.

Some central bureau of publications for each language area could perform a wonderful service by coordinating publication for the whole area of the various departments and providing magazines and newspapers with suitable material in simple vocabulary or publishing such material themselves. The possibilities of tabloid or largely pictorial magazines making use of techniques developed by the comic strips are very great. Mexico created such a paper to teach hygiene effectively. Rabindranath Tagore did much to lead Bengali writing away from the use of stilted literary language to the use of the language of common speech. Much remains to be done in Orissa along this line. Poverty often prevents the villager from reading. In China extensive use has been made of wall newspapers posted in some central place in the village. Large print, attractive style and design, ready availability, low cost, good advertising, interesting material, brevity and many other factors enter into the production of material that will be read by the masses.

Educational films have been more widely used than ever before in these war years. The same provincial bureau in charge of publications might well have responsibility for producing and serving as a distributing center for slides, films, and sound movies, and phonograph records which depict the life of the province and dramatize the incidents which illustrate the need for and the success of community welfare projects and propagate the health, conservation, and other messages which are needed.

The public forums which have been organized in Des Moines and many other places and the radio programs which discuss public issues as the "Town Meeting of the Air" give opportunity for presenting the views of specialists of repute and for group meeting for thinking and discussion of the issues raised. The Punjab has done far more than Orissa in experimenting, with providing radio programs aimed at the needs of village listeners and furnishing the village with receiving sets to be used at central meeting points.
Many public libraries have children's hours for reading aloud or telling stories to preschool children. With the Eastern tradition of trained reciters and story tellers much could be done in adapting this practice to adult education purposes. Songs and music have long been used to inspire loyalty, stir up patriotic fervor and to present a great variety of teaching. The Chinese New Life Movement sponsored by Madame Chiang Kai-Shek has many songs of this type. Surely Oriya tunes and song writers and community singing could be used educationally to further the program.12

The Indian tradition of fairs, melas, festivals, and celebrations gives many occasions which could be used for educational as well as recreational purposes. Drama and pageantry developed for use at these times carries a message to both performer and spectator.

**Organization and Financing of the Plan**

There are two great schemes before the Indian public at the present time concerned with health and education: the Report of the Health Survey and Development Committee under the chairmanship of Sir Joseph Bhore and the Report by the Central Advisory Board of Education on Post-War Educational Development in India. The former report was presented in 1946 and the latter in January of 1944. In addition the province of Orissa prepared a considerable volume of proposals for developments regarded as necessary following the war. All of these schemes call for greatly increased organization and expenditure in the various services though they of course anticipate that the values derivative will make possible the economic expenditure contemplated.

In considering the organization and financing of a program of adult education of the comprehensive type indicated in the previous chapters of this study it seems important that we make the maximum possible use of existing organizations and staffs and that as far as possible financial outlay shall be limited to the payment of the minimum essential directing staff and such subsidy as shall be necessary to stimulate local effort. Much of the work can be done through the coordination of the efforts of already existing institutions and staff with little increased outlay except insofar as the changes already contemplated call for superior training and better pay for these existing posts.

There are in Orissa eleven administrative units. The province consists of 6 districts, Balasore, Cuttack, Ganjam, Koraput, Puri, and Sambalpur, and acceded areas, which have formed five independent districts, Mayurbhanj.

Keonjhar, Dhenkanal, Bolgir-Patna, and Sundargarh; the remaining states have been attached to the neighboring districts. Within these eleven districts are 21 smaller administrative units called Taluks which were ceded from Madras to the new province and 51 units called Thanas, most of which were part of Bihar and Orissa. The 21 Taluks have an area of 17,532 square miles, a population of 2,983,126. They average 834.8 square miles in area and 142,054 in population. The 51 Thanas have an area of 13,815 square miles, a population of 5,743,126 or an average area of 270.9 square miles and population of 112,655. The larger Orissa States are similarly subdivided. These smaller subdivisions in use for administrative purposes have an average of 321 villages per thana and 405 per taluk. In these thanas and taluks there are varying numbers of dispensaries, schools, cooperative societies, subordinate officials of agricultural, veterinary, police, postal and excise departments, subregistrars of deeds and other official documents, surveyors, vaccinators and other representatives of provincial and district government. Some phases of government services, both local and provincial, are available on a district rather than a smaller administrative group basis as demonstration farms, veterinary hospitals and the like.

It is essential to make use of the fundamental administrative units already set up. Eventually there will need to be a regional planning and coordinating council or board for adult education whose major function would be to coordinate and enlist the cooperation of the public and of all agencies at work in Orissa and the Orissa States on a cooperative extension program of a comprehensive kind. Similar councils would need to be developed on a subordinate scale for the Orissa States and the Province; below them others for the individual States and Districts. Under the district and state councils would be thana or taluk councils and below them community committees of economic planning and social action.

Each of these regional, provincial and district councils would need to have a very carefully selected full-time executive officer. These executive officers would be assisted by subcommittees responsible for planning work in the eleven areas of need suggested earlier in this chapter. While it is hoped and expected that specialists may be found or trained to work with the various executive officers in carrying their work into the eleven areas of need described, at the beginning at least, it is contemplated that each assistant will combine two or more areas of need in his or her specialty, as community organization and recreation, or leadership training and the teaching of the fundamental or tool subjects. This would make it possible to contemplate not more than five or six assistants to the executive secretary at the start.
These men and women who will serve as specialists in the various lines might very well be loaned by the different departments as part of their contribution to the cooperation and coordination of work contemplated by the program. It would be essential, however, that their status and duties be clearly defined and that they be subject to the control of the executive officer during their service to the cooperative extension scheme. Members of the staffs of education, health, agriculture and other departments of government may be eminently suited by disposition and training for such a service but whether such men are found within the departments or outside only the very best should be employed. All of them will need knowledge of cooperative method, a high degree of initiative, crusader’s enthusiasm, persistence and faith in each other, in the common people and in the program. They must be teachable and keen observers, able to get along with people of many different backgrounds and temperaments.

It is expected that during the first five years of the plan the district councils and their executive officers and specialists will spend the major part of their time functioning more or less on the pattern of a Mexican Cultural Mission concentrating in one or two thanas. They will be gaining practical experience and attempting to train local leaders in the communities and to build up a staff within the functioning agencies in the thana which will be able to carry on and extend the program after they move on to other thanas.

A second phase of their responsibilities during this period will be the building up of suitable materials and methods of work, libraries, museums, exhibits, demonstrations, etc. They will be continuously trying to educate all service personnel of government departments and members of nonofficial agencies to the meaning and methods of the program and to the possibilities and importance of their cooperation in it. They will guide the work of teachers in training in the lower and higher grade normal schools who shall be assigned to work under their direction, not less than two months each year of their course. They shall have a total of three months leave in the year from actual field work at least 45 days of which shall be spent in the “ashram,” in conferences and institutes for the evaluation of the work done and consideration of means for its improvement, or in assigned short courses to increase their knowledge of their specialty or some other needed phase of the work. The balance may be taken in vacation, casual and sick leave at the discretion of the executive officer in charge. Leave shall not be cumulative and shall be taken in such staggered fashion as not to seriously affect the functional efficiency of the group as a mission.

Bookmobiles and traveling museums and projection outfits shall be provided as the program develops, at least one for each district in the initial
stages and not less than one for each thana as the ultimate goal. An important bureau or section of the regional or provincial executive office shall be concerned with the production and publication of audio-visual educational materials and their widest possible distribution. All new programs and materials developed locally shall be reported to them for widest possible use. The various departments, when planning publications, shall refer to them for guidance in preparation of manuscripts and illustrative material so that as much as possible of information regarding health, agriculture, livestock, forests, etc. shall be couched in terms that can be understood and readily grasped by those who most need that knowledge. Broadcasting for the ryots of the region shall be part of the program of this bureau. The program, time, and nature of the broadcasts shall be guided by the interests of the comprehensive adult education program though the cooperation of missions and other nonofficial as well as official agencies shall be sought in this connection. Preparation of recorded material of a wide variety of types shall also be part of their responsibility.

Among the publications of this bureau shall be lists of all the agencies, public and private, local and national, who are able to help in any way on the comprehensive program, with a description of the type of service they render and the steps which must be taken by local groups or individuals to secure that help. A similar catalogue of the materials, books, magazines, newspapers, films, program materials, exhibits, posters and the like which are available in any of the languages used in the province together with the sources from which they may be obtained and the cost thereof shall be published from time to time. These publications must be kept up-to-date to facilitate use of such resources as are available.

Another function of the regional or provincial council and staff shall be to aid in the organization and functioning of village welfare associations or community committees of economic and social welfare and action, to aid in the organization of mothers' clubs, cooperatives, 4-H clubs for in-school youth and future farmers clubs for out-of-school youth. They shall provide guidance for program building, leadership training opportunities, help through the publication of leadership manuals, and other aids. They shall organize exhibits, fairs, demonstrations, tours and other activities which shall stimulate interest and build up the program of the various clubs, cooperatives and associations. The supervision and guidance of these activities with special attention to their educational functions shall be carried on through the subordinate district and thana or taluk councils and full-time staffs together with the volunteer leaders enlisted and trained for the purpose.
Working with and through the Director of Public Instruction and the personnel of his department the attempt will be made to shift the emphasis of all education in the province and more particularly primary or basic junior and senior schools from an academic conception of the educational function to a community school which shall work in terms of community needs and resources and consider the whole population of all ages the proper clientele of the school. These schools will be concerned with both sexes and all ages. The students will be treated as members of groups. Family and community interests will be given special consideration. Organizations for particular purposes—athletic teams, group health organizations, cooperatives, orchestras, dramatic parties—may evolve from the activities of the school or be associated with it. These organizations shall be under the management of their members and the school function as a teaching agency helping them evolve special teaching projects and develop their educational programs. The Mexican emphasis described, where the pupils learn by actually doing some of the things which need to be done in rural situations, should be strong.

At least one coeducational school of middle or senior basic grade with a demonstration farm attached should be developed with a program of family unit residence on farms comparable to the average size cultivated in Orissa. Provision for 16 families on 2.5 to 3.5 acre farms plus an acreage for the use of the students of the school and experimental work, would require an average size of about 60 acres. In the first instance one of these farm schools per district should be developed and gradually extended until each thana possessed one. Provision would need to be made in the school for adequate home economics and health and hygiene instruction. On the completion of a five-year course, the families would be expected to return to the villages from which they came and to put in practice what they had learned on their own home acres. They would be helped to re-establish themselves and might be given certain concessions such as rent-free lands in return for services which they would be expected to render as community leaders. As far as possible the villages themselves would be responsible for the selection of the young families which would undergo this training. Such criteria as health, vigor, intelligence, present leadership ability and influence, the possibility of return to a small but typical farm after training and the like would be considered. This modest beginning would provide such education to one family per village per thana in which schools had been established only after one hundred to one hundred twenty-five years.

The school inspectors of the present system should be developed toward the ideal of the Jeanes Visiting Teachers and be given not more than 40
ORISSA'S EDUCATIONAL NEEDS

schools to supervise. They should be expected to spend from five to ten days in a village each year trying to build up the school's community outreach and to encourage and strengthen the work of the local teacher or teachers. They should encourage the building of model residences with suitable garden plots for teachers so that each school might have resident teachers demonstrating in their home and family life improved practices worthy of emulation. These “supervisors” or “visiting teachers,” as we prefer to call them rather than “inspectors,” should be adequately remunerated and of such a character that their visits would not be in any sense a burden on the local teachers or the community. Mobile audio-visual equipment and libraries should be available for the use of these visiting teachers wherever possible.

Similarly the development of health and agricultural officers whose duties would be of an educational, advisory, and supervisory nature in connection with the programs of the local community councils and thana or taluk councils is essential. The attention of the entire medical staff of the area must be called again and again to the need for education that shall eliminate the causes as well as cure the results of disease and their cooperation in preventive and public health programs enlisted. The agriculturalists need to select certain fundamental practices for emphasis and special teaching from year to year as seed selection, breeding of better plants and animals, soil building and the like. These and the representatives of other departments would be experts in bringing to bear on specific village problems the resources of specialized knowledge and research which are available in India or even in other parts of the world.

It is anticipated that experiments be made in placing a public health nurse, a home economics demonstration agent and a woman teacher in model homes or teacherages. These three young women living together would make socially possible a program primarily for women, girls and children which otherwise could not be contemplated. Maternity and child welfare work, kindergartens, mothers' clubs, and out-of-school girls' clubs aside from the teacher's contribution to the work of the community school would be possible. The actual demonstration of improved practices in home, garden, classes, club work, and the like would be important features of their work. The public health nurse and home demonstration agent would reach out into nearby villages and schools. One such experiment should be begun in each district at the onset of the plan and these multiplied as fast as the availability of staff and finance permit. Eventually each thana should have several such demonstration centers responsible for work in a dozen or more nearby villages.
While the programs would be flexible and sensitive to local conditions, capable of continuous adaptation, there would be schedules of emphases guided by the regional council and executive staff which might stress increased production, better nutrition, literacy, arbor day and reforestation, intercommunity communications, limitation of the size of families or whatever seemed most urgent from time to time. They would seek to secure the cooperation of every agency, official or unofficial, and all publications and other media of public information in presenting these emphases. These campaigns would of course enlist school support against alcohol and narcotics, for personal and community hygiene, better housing, the enrichment of recreational life and the introduction of new crops or specific practices selected for province-wide emphasis at certain times. Increasing the size, circulation, and facilities of libraries, enlarging the repertoire of local musicians, introducing action songs and songs with an educational and social message, provision of first-aid and local dispensing centers or community sewing rooms, and a host of other things come to mind which campaigns and publicity of the right kind, through the cooperation of all agencies and moulders of public opinion, might stimulate.

The cooperative banks and organizations in the province might well investigate the cooperative employment of trained managers for clusters of small farms. The management ability, the knowledge of improved tools and design, the capital to buy supplies of raw materials to advantage and the contacts to sell their products at good prices are problems which the industries department and cooperative organizations can work out together. Close supervision, a careful educational program and experiment with many types of cooperatives seems likely to make possible a major improvement in the life and practices of rural India. The people in India who need this help are not accustomed to acting as individuals, they have not the margin to take risks, nor the business experience and resources needed to produce and market economically or to buy their supplies to advantage.

In regard to the financing of this scheme it should be the result of the cooperation of the local community or union board, the thana or taluk organized as a unit of local self-government with certain taxing powers, the district and the province with possibly some help from the federal central government. The local help would need to be largely in terms of volunteer labor, union board taxation or cooperative financing. Something might be done through the use of arable land and grazing land now held in common. On the thana and district basis it seems possible to do something by a revision of the chaukidari system upon which watch and ward, vital
statistics, crop estimates, and various other services depend. A much better grade of village official is required who might fit into the total adult educational program. Upward revision of the chaukidari taxes would work small burden on the peasant, particularly if the spread between rental paid to the landlord and the landlord's payment to government were reduced or eliminated.

Another source of income or support for the program might come from a revival of the paikari system of land given in exchange for services. The land necessary for such assignment might come from lands brought under cultivation through new irrigation schemes, waste land rehabilitated, land taken over for taxes, and that held at present as landlord's or government khas. A tax on polished rice is suggested as likely to discourage the use of the more unhealthful mill product, likely to bear most heavily on those with higher incomes, and in part having the effect of an export duty as much of the polished rice is at present shipped out of the province. Endowments from rich organizations and individuals have from time to time been available in India for worthy enterprises and institutions. A fund of several lakhs of rupees was recently raised by public subscription to endow the Wavell Homes in Ganjam and Balasore which will care for perhaps 100 famine orphans. Could not the public interest be enlisted for the financial provision for an adult education program? Tax on betel nut or other ingredients of "pan," the Oriya national chew, while not likely to be popular would be spread over a large group and tend to discourage a habit which has serious health hazards because of the expectoration of the red juice in so many public places.

If the developing program produces anything like the benefits which have been observed to result from effective extension work in other countries the masses of the people will in time be ready to accept the measures necessary to pay for the service. Actually demonstrated results in changed practices and better living will quickly increase both willingness and ability to pay its costs.

The seventh and final chapter summarizes this study and attempts to present in outline form the program of adult education tentatively proposed.
VII
SUMMARY AND RECOMMENDATIONS

The problem of this dissertation is the development of an adult educational program adequate to meet the basic needs of the people of Orissa. The objectives include the suggestion of the goals, areas, and methods of study required by the changing milieu of the Oriya people. Clear delineation of the problem and a tentative program for its solution on the basis of a canvass of the experience of others was attempted. Orissa was taken to include not only the one of the eleven governors' provinces of British India so named but also the twenty-four Orissa States which have now merged into the province.\footnote{With the merger of the twenty-four Orissa States with the province, a total of thirteen administrative units or districts have been formed.}  \textit{Adult education}, as used in this study, means the motivation, encouragement, guidance and enrichment of the day-to-day experiences of all members of the community who have reached an age such that it is unlikely that they will receive formal education, as they seek to know their real problems and solve them in the context of optimum group and individual welfare. It was considered axiomatic that effective education must deal with adults as well as with children. Because of the long-continued control of children, work along natural primary-group lines proceeds from felt need to real needs and their causes and seeks a simultaneous or balanced adjustment of the whole individual and group, rather than a one-sided development.

Instead of continuing a summary of section VI which must list principles, methods, organization, and finance in addition to the areas of need outlined above the main features of the program are presented in more or less abbreviated form below.

\textbf{Areas of Need for Which Adult Education Must Be Provided}

1. Agriculture or appreciation and use of environment.
2. Homemaking education.
3. Health and the maintenance of life.
4. Vocations, crafts, industries, and occupational opportunity.
5. Community organization, group work, and cooperative effort.
7. Recreation and the enrichment of leisure.
8. Literacy and the tools of learning.

\textit{\footnote{}}
10. Survey, research, and evaluation.
11. Leadership training.

Basic Assumptions

1. In a patriarchal society, such as Orissa's, where adult control extends far beyond the years of formal schooling, education to be effective must include the adult.
2. Education must work with all members of basic social units, primary groups, at the same time.
3. The place to begin the educative process is the point of felt need.
4. The problems of the villager are so interrelated that only a comprehensive approach that deals simultaneously with all phases and relationships will be fruitful.

Some Important Conditions for Efficient Learning

1. Frequent clear and exact definition and statement of objectives and desired outcomes in terms of improved practices, understandings, and attitudes aids learning.
2. Experiences and materials for training should be included only on the basis of direct and significant relationship to the goals and anticipated outcomes.
3. Understanding of the reasons for, the why, of what is being taught is especially important in adult learning.
4. Numerous varied opportunities, which simulate life situations, for using the knowledge, skills and abilities taught are required for permanent learning.
5. In order to guide training programs and identify student difficulties and strengths continuous evaluation is needed.
6. Motivation, the development of abiding inner compulsions which lead to action, has primary importance for education.
7. The careful analysis which divides the job or unit of work into successive steps and key points is important. The progressive attainment of these both encourages the pupil and leads him on to the desired outcome by a series of stages within his capacity.

Additional Important Principles of Extension Work

1. Use every avenue of approach—eye, ear, hands, imagination, sense of humor—in combination for greatest impression.
2. Start in advantageously located community where easy entry can be gained on simple projects important to many, in which the beneficial result of the improved practice can be clearly demonstrated.
3. Make each meeting or phase of the program lead to action. People learn by doing. Secure cooperation of all concerned, in both planning and action. Do not attempt to teach what you cannot do yourself.

4. Help people to help themselves rather than doing for them. The program should evolve from the people and remain their program, be democratic in operation and have at least part of the cost borne locally.

5. Make vivid what the problem really is: Demonstration by the people themselves of the improved solution is more effective than much explanation: Point out cause and effect relationships.

6. Work with the poorest land and people—those better off will be able and willing to copy results achieved there.

7. Do intensive work in a small area until methods are tested, then expand.

8. Put as much fun as possible into the process.

9. Proceed from the familiar to the unfamiliar, basing programs on what people already know and have. Use farmers' experience-bought wisdom. Bring together in familiar environment people who already know one another when seeking cooperative action on new ideas.

10. In discussion try to agree and modify rather than to disagree and argue.

11. Balanced evolutionary progress should be sought, carrying forward together or in alternation of stress all eleven of the areas of need presented above.

12. Close, repeated contacts between trusted, trained leaders and the people and demonstrating the need and practicality of the program over relatively long periods of time are necessary.

13. The cooperation, coordination and integration of the work of all agencies and organizations functioning in the area is highly desirable.

14. Thorough knowledge of values and pillars of the local culture makes possible its use and development rather than radical substitution. Use the support which the system of belief, folkways, mores, proverbs, and mythology will give to the new ways. Show appreciation of old, and of the new fulfilling its ideals better.

15. Use indigenous methods and support to further ideas and purposes evolved: the trained reciter or story teller, the dramatic party, the drummer announcer, the local festival, etc.

16. Utilize natural, local leaders appropriate to a given situation. Take adequate notice of matters of role and status. Give respect, credit and honor where it is due. Make local organization or leader feel responsible for any achievements.
17. This rural educational program must work with and for all the varied individuals within the community and cannot afford to be class or group conscious. The needs of the whole community should be met.

**Important Adult Education Methods**

1. Home and farm visitation.
2. Method and result demonstrations.
3. General meetings.
4. The promotion of clubs, societies, associations or cooperatives.
6. Provision of visual aids.
7. Extension courses, conferences, institutes, short courses.

**Special Educational Techniques**

1. Pictures: stereoptican, film strip, educational movies, etc.
2. Tabloid and comic strip picture techniques, lithographed or printed pictures, charts, diagrams, and drawings.
3. Models, specimens, exhibits, museums both stationary and traveling.
4. The printed page with or without simplified alphabets, and vocabularies, large print, color, design, and other attractions. Wall newspapers.
5. Libraries, mobile and stationary. Reading aloud.
6. Drama, pageantry, musical presentation, songs with a message.
7. Classes, lectures, group discussions, panels, forums.
8. Agricultural and other fairs, melas, festivals.

**The Organization of the Adult Educational Program**

Orissa Provincial Council
District Councils
Than and Taluk Councils
Village Welfare Associations or Gram-Panchayats

**Persons, Agencies, Offices Considered for Membership on the Provincial Council**

Minister of Education
Minister of Health and Local Self-Government
Director of Public Instruction
Director of Health and Inspector General of Prison Services
Director of Development
Director of Agriculture
Director of Industries
Registrar of Cooperative Societies
Inspectress of Schools and Principal of Ravenshaw Girl's School
Chief Engineer Provincial Public Works Department
Principal Cuttack Engineering College
Heads of departments of Sociology, Economics, and Psychology
Utkal University
Director of Provincial Government Information Service
Superintendent of Government Printing
Superintendent of Police
Representatives of Missions and other service agencies at work in
the area.
Representatives of the public, particularly of the more important under-
privileged groups.

TENTATIVE DIVISION OF RESPONSIBILITIES OF MEMBERS OF PROVINCIAL
BOARD

Executive Officer—Leadership Training
1st Assistant—Agriculture and Common Learnings
2nd Assistant—Homemaking and Literacy
3rd Assistant—Health and Recreation
4th Assistant—Occupational Opportunity and Survey
5th Assistant—Community Organization and Religion

PROVINCIAL SUBCOMMITTEES OR BUREAUS

1. Executive: charged with the over-all coordination of the work,
selection of program of emphases, supervision of work of "Cultural Mis-

2. Bureau of Extension Services: charged with production of audio-
visual educational materials, an agencies list, a materials list, the inaugura-
tion of a library service, a broadcasting service, and the production of record-
ings for use in the villages.

3. Bureau of Extension Clubs and Organizations: charged with the
production of leadership manuals, program materials and over-all guidance
of village welfare associations, study and action clubs, mothers' clubs,
organizations similar to the 4-H clubs for in-school boys and girls and an
adaptation of the Future Farmers organization for out-of-school young
men and women.

4. Bureau for the Extension of Community Education: charged with
the development of a coordinated system of visiting or supervising teachers,
agriculturists, health and sanitary agents, etc., who shall function as a team
SUMMARY AND CONCLUSIONS

within the thanas or taluks. The Family Unit Schools, Home and Health Demonstration Centers, and Pupil-Teacher Service Camps' development shall be their responsibility.

DISTRICT ORGANIZATION

An Executive Officer with five assistants dividing their work up in fashion similar to the Provincial Adult Education Board suggested above would function very largely as a movable school or "cultural mission" in the thana or taluk selected for intensive work during the first five years of the scheme. At least one truck fitted out with the best possible equipment for use as travelling library and audio-visual educational unit shall be supplied to each of the thirteen district organizations. In turn, the district organization shall be responsible for close cooperation with the work of the three provincial bureaus and the executive. With the extension of the program to include more and more thanas the district organization will become increasingly supervisory and assume direct leadership of thana and local organizations and agents.

THANA OR TALUK ORGANIZATION

It is assumed that as the program develops a full-time executive officer of the thana council will be appointed to work as a coordinating agent with the agriculturist, visiting teachers, health and sanitary agents, and other departmental officers working in the thana. This group will largely take over the functions of the "cultural mission" and work to develop local leadership and strengthen adult education in the villages. Each thana shall in due course be supplied with a mobile audio-visual adult educational unit.

LOCAL ORGANIZATION

The presence of a school, church, dispensary, cooperative, union board, or functioning panchayat may give a point of integration around which the local community can function for study and action. Otherwise a new organization or welfare association will have to be built up. This functional community center will have to organize special groups for activities as dictated by the needs of the village situation.

FINANCING THE PROGRAM

Finance shall be provided through cooperation between the local community or union board or Gram-Panchayat, the thana organized as a unit of self-government, the district, and the province.

Local finance would come from contributions of money and labor, cooperative financing, union board taxation, or better use of communal land.
Thana contributions might come from an extension of the paikari system of land given in exchange for services, or the revision of the chauki-dari system and increasing taxation while lowering the share of rent now kept by landlords.

District and provincial shares might come from taxes imposed on polished rice and the ingredients of “pan,” the Indian national chew, and from endowments.

Recommendations to Mission Authorities

1. Pending government action on this scheme, it is recommended that the United Literature Board and Adult Literacy Committees of the Utkal Christian Council be asked to do what they can of the functions of the three provincial bureaus suggested above.

2. That a part-time “ashram” be established at Chandipur, Balasore District.

3. That Hatigarh Middle Co-educational School be developed to provide an experimental family unit farm and home demonstration school.

4. That at least one home and health demonstration center with resident home economics trained worker, nurse, teacher and/or higher trained Bible woman be established.

5. That the longer vacations in the school year be used for short Service Camps for selected students from high schools and teacher-training institutions.

6. That a superior grade visiting teacher, an agriculturist, and a recreational leader be employed to work with the staff suggested in 4 above and to try to develop all rural schools of the mission toward the goal of community education with special emphasis on adult education.

7. That a truck be fitted for mobile audio-visual education, library, exhibit, and first-aid service.
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OREGON STATE MONOGRAPHS  
(Continued from inside front cover)

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