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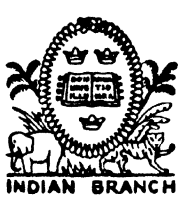
TOWARD FREEDOM FROM WANT

From India to Mexico

BY

D. SPENCER HATCH

B.Sc., M.Sc. in Agr., Ph.D.



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WHEN the poor and needy seek water, and there is none, and their tongue faileth for thirst, I the Lord will hear them, I the God of Israel will not forsake them. I will open rivers in high places, and fountains in the midst of valleys: I will make the wilderness a pool of water and the dry land springs of water.

Isaiah

Here is thy footstool and there
rest thy feet where live the poorest,
and lowliest, and lost.

When I try to bow to thee, my
obeisance cannot reach down to the
depth where thy feet rest among the
poorest, and lowliest, and lost.

Pride can never approach to where
thou walkest in the clothes of the
humble among the poorest, and lowliest,
and lost.

My heart can never find its way
to where thou keepest company with
the companionless among the poorest,
the lowliest, and the lost.

RABINDRANATH TAGORE

Gitanjali

TO THOSE GREAT NUMBERS OF

BOYS AND GIRLS,

MEN AND WOMEN OF RURAL EAST AND WEST

WHO, BECAUSE THEY KNOW NOT

HOW TO PROVIDE FOR THEMSELVES,

ARE HUNGRY, UNHEALTHY, UNHAPPY AND DEPRESSED

THIS BOOK IS DEDICATED

IN THE HOPE THAT ITS INFLUENCE MAY HELP

THEM AND THEIR POSTERITY

PREFACE

THE theme of all great romances is the quest. The knights in the days of chivalry sought the Holy Grail, a lost lady-love, or sometimes adventure for its own sake; the scientists and leaders of today seek in fresh fields of romances, new principles, new methods. There is always the quest.

I am one who loves to tread strange, new paths, down which no one has gone before. I have delighted in walking day after day, on and on, through Indian primeval jungle armed with only a pocket camera, a New Testament, and an inquiring mind, and accompanied by my wife who was the first woman of her race to walk that trail, where the paths are made by the wild animals—elephant, bison, bear, tiger, leopard, and wild boar. While the beaten paths had many who could serve along them, it was to my liking for twenty-four years to be engaged in a pioneering quest, to help find ways for the poorest and lowliest of India's rural millions to lift themselves upward from a many-sided poverty toward a more abundant life.

There is romance in developing an impoverished country to make it fruitful; in finding and adapting principles, methods, and projects; in so teaching these to under-privileged people that they in turn can make them their own. My book *Up From Poverty* deals with the first half of the story; *Further Upward*, written after a few more years of work, recounts progress toward further fruitfulness. *Up From Poverty* deals more with planting, *Further Upward* with growth and some full corn in the ear. By that time we could see Indian village families with their bare feet firmly planted on smoother and happier paths.

These paths are leading these families, and will, we trust, lead their children's children ever further upward.

Then the World War II prevented our returning to India from furlough. Until the infested seas should clear, we were urged to help start our kind of approach to rural peoples on this other side of the world—in Mexico. We went again to neglected people whose bare feet and animals made the paths.

This book contains the main points of the story of both *Up From Poverty* and *Further Upward* and a chapter on the Mexican experience which indicated to us that well-tried, sound, principles and methods will serve anywhere, if skilfully and devotedly adapted to the culture, the needs, and the wishes of those who dwell there.

Turrialba
Costa Rica

D. SPENCER HATCH

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CHAPTER I

UP FROM POVERTY

The Problem

Poverty and need make themselves evident on all sides when one goes among the village people of rural India; but to determine their extent for a basis of work to be done, I have made an extended study.[1] From the mass of detailed information collected and which cannot find place in this volume, the following summary may be made.

The food supply is insufficient; it is poorly distributed and a large portion of the people, probably one-third, is underfed. Furthermore, the analyses show that the diet of most of the people is not a balanced ration and does not adequately nourish the body even when taken in quantity.

Clothing, though less needed during some than other parts of the year, is very essential to health and comfort in the coldest and rainy seasons; and a large percentage of the people have not the means to secure the needed clothing. There is much suffering and illness, and heavy mortality as a result.

Large numbers are improperly and unhealthily housed.

Few of the poor possess land of their own, and those who rent generally do not have large enough plots to produce a decent living for their families, or to give the cultivator and his family anything like full-time employment. The need for subsidiary (home) vocations is great.

[1] After two years of collecting data according to a definite outline, I finally obtained a full year's complete leave from other responsibilities and devoted all my time to making this study as complete as possible.

Rural labourers hardly make a living wage for the very lowest standard of living. They generally have no surplus and no chance of saving. Many of them are under a form of serfdom.

Live stock and poultry are generally poor in breed, poorly kept, unproductive, often a positive loss.

Agricultural implements and cultivation methods are exceedingly primitive, requiring much unnecessarily hard labour without the prospect of full yield from the soil.

Certain religious and social customs and uneconomic traditions definitely accentuate the distress of the country and retard its rise out of its poverty.

Health conditions, though improving, still give our Indian people the lowest expectancy of life of any in the world—less than 25 years. The need of healthful recreation (which religion and custom have rather discouraged) and physical education is very evident.

Education, though in many respects and places excellent, reaches only a small percentage of the people and is only to a limited extent *rural* education even though the country is essentially rural. It is not well related to the lives of the pupils or to their environment. While this education is not responsible for the disdain of manual labour, it has not used its opportunity to correct it, and its high school and college graduates do not see the dignity of hand labour, without which no nation can rise out of its poverty. Large numbers of these graduates are unemployed, contributors to discontent and a drain upon rather than a help to the resources of the country.

Self-Help

Self-help is the only way of growth to a permanently happier state, but there is a helplessness in the Indian rural village almost beyond belief. The poorer rural people feel their ignorance, their poverty, their comparative weakness. They have little confidence in themselves—how can they give leadership? In their minds their only hope for better things is that these better

things be given them or arranged for them by the Government, some philanthropy or charity. Their part is only to get someone, who can write, to frame the familiar 'appeal' stating their difficulties and grievances, then to get some 'respectable gentleman' to back their appeal or to let his name be used in connexion with it.

The old panchayat was a self-help system. That having fallen into decay owing to various factors connected with taxation and administration of the centralized Governments which were artificially set up in supersession of it in various provinces and states, the Indian village was left with no self-help or self-control organization of its own. Seeing that the decay of the panchayat with nothing similar in its place has many undesirable results, Governments, provincial and state, are making efforts to revive the panchayats as rapidly as is practicable. Unfortunately, the very fact that Government has to make the effort retains the official disadvantage.

This leaning on a highly-centralized Government, and the comparatively large place Government plays in Indian life, is far beyond the realization of these people who have so long had things done for them. Their whole consciousness, thought and action is coloured by the officialdom in their midst. Comparatively, many other peoples of the world hardly realize they have a government.

The above conclusions stated in the fewest possible words bulk large in the Indian problem. India is still a country so ultra-rural that her problem is largely a rural problem. This is such a self-evident fact, that the slowness with which both official and non-official agencies working for India's welfare have recognized it in practice is difficult to understand.

Self-help with intimate, expert counsel is the way up and out. Through that combination of effort, the poverty, backwardness, depression and misery of India must give way to a permanent and growing happier state. This book tells a story of experimentation and practice in methods of self-help with intimate, expert counsel.

CHAPTER II

SOME FUNDAMENTAL NEEDS

Comprehensive Programme

The Indian villager is not much benefited unless he is helped simultaneously in every phase of his life and in regard to every relationship he bears to others. Working more especially with the poorer portion of the rural village population, we have experienced this fundamental principle.

Surrounding the villager with benefits. The service must be comprehensive and it must be simultaneously comprehensive. When we have provided cheap capital for the ryot and redeemed him from the clutches of the usurer, unless we help him to organize and to market he will not keep what he has. The Indian villager is the prey of many kinds of sharks, who take advantage of his ignorance and good nature. There are, for example, middlemen who are present at every harvest. The money-lender is one of these. He used to be able to settle the price of the crop at the time of sowing and even now he makes his haul at the time of threshing. If we have not taught the poor cultivator how to organize and provide himself with cheap capital, and if we do not stay by him as a friend, the big middlemen, the usurers, organizing marvellously and able to wait longer, generally knowing men and business better, can get out of the labourer a very great part of the profit which ought to have remained with him. 'If happily, perhaps on a sudden turn of the wheel in the price of ground-nuts or cotton, the ryot does happen to "prosper", there is always around him a swarm of impecunious

relatives, ingratiating village officers and even professional law touts who sedulously sponge on him and keep him carefully down to the standard of bare necessaries'; so Mr K. T. Paul has written. These facts give some idea why we include in the Rural Demonstration Programme such a variety of self-help methods. They aim to help the rural family, spiritually, mentally, physically, socially and economically.

In India there has not been a comprehensive survey or handling of the rural problem as a whole. We need to get away from the lamentable fragmentation of effort which has resulted in a regrettably small result from the expenditure of public funds, depriving the development movement of its effectiveness. The number of minor officials who now deal piecemeal with his problems, the villager cannot understand and often does not trust. They are more likely to exasperate than to awaken him from his present attitude of indifference to progress. Representing different departments, with little co-operation between them and no connected plan of work, one visitor collects revenue, one advocates co-operative credit, another improved seed and new implements, another comes to inoculate cattle and another to vaccinate children, another deals with sanitation, and another inspects the village school.

Sir Malcolm Hailey, speaking to the charge that Government has attacked almost every problem except the one which is most important of all, namely, the improvement of the conditions of rural life, says 'the charge is to this extent true, that we have never made a direct and concerted attack on this problem; we have never deliberately attempted to effect that change in the psychology of the peasant, and in his social and personal habits, without which it is impossible materially to improve his conditions of life'.[1] We want our Rural Demonstration Centres and their comprehensive extension programme to work toward effecting these needed changes.

[1] In Foreword to *The Remaking of Village India* by F. L. Brayne.

Rural Social Organization

All over the world it is recognized that for the highest welfare there must be a goodly number of people in each community willing to give themselves to community betterment without material reward. There is, however, so often a dearth of such people. In over one hundred rural villages of Travancore and Cochin States, as many village associations (YMCA's) constitute an outstanding demonstration of what can be done in whole-community service by unpaid local workers. I tell about these associations in the chapter on 'Extension Service'. They are an experiment in rural social organization in which sociologists, economists, and statesmen in several countries are taking an interest. They are our fortunate foundation for spreading new methods and benefits.

In our off-the-beaten-path villages in an old and comparatively slowly changing rural civilization, the effect of any set of methods applied to village life can be so much more accurately measured than effects of similar application of methods in an English or American village for instance, where so many other new forces are in operation. The difficulty of controlling all conditions in sociological experiments generally works against their being truly scientific. One of our villages here more closely approximates to the test tube of the laboratory. Even more than in any other part of India, Malabar social life retains free from decay every ancient custom that ever existed there; and side by side with the old customs, the new method is tried out. We can note and measure effects.

To engender effective self-help the first thing we work for is co-operation for the good of all. The development of the community in the naïve, every-man-for-himself, rural area involves the gradual transformation of conflicting interests of individuals into like interests. The people have to be persuaded—and this is a very personal and intimate business—to change from their methods of direct antagonism, isolation and competition to the method of co-operation.

We use the co-operative method in everything we do. In our area it is quite clearly seen that this poverty on all sides, this failure in economy, is largely due to failure in sociality. But so long as great numbers are, through no fault of theirs, destitute and expropriated they cannot attain any adequate socialization. Community means for them merely a system of driving outer forces to which they are subject, and which they cannot in the least control.[1]

The poor then have even more need for co-operation than the well-to-do. They need simple organization to help toward socialization and to help them master the forces that now control them. In India there is an aversion to too much organization. There is a belief that westerners, fond of organizations, set up too many and then weary themselves trying to keep them running. This is more or less true. 'Red tape' is a form of it.

Simple organization, however, puts into the hands of the Indian villagers a help without which, with their limited means, they find their task of self-help too difficult. Sociologists cannot but sympathize with that innate and subtle dislike of too much organization in the struggle toward social and economic liberty, that is in the heart of the Indian. It is necessary to rid ourselves of the notion that organization is in itself a good thing. It is very easy to fall into the notion that growing complexity is a sign of progress and that the expanding organization of society is a sign of the coming of the co-operative commonwealth. A constantly growing measure of co-operation among men is the greatest social need of our day; but co-operation has its unorganized forms.

Surely the unorganized co-operation of men based on a sheer feeling of brotherhood, is not less valuable than organized co-operation, which may or may not have the true community spirit behind it. In the development of rural India we need simple organization because it is easier to do most things with organization than without.

[1] See Robert MacIver, *Community*, pp. 331-40.

Organization is the scaffolding without which we should find the temple of co-operation too difficult to build.'[1]

Our village people find that they cannot, single-handed, realize either their personal desires or the good they would like to do the community. They sometimes express this as a reason for banding themselves together into the village associations which I am to describe, and it is the reason for the various forms of co-operative societies we have in our area together with the South Travancore Rural Development Association. It will be seen that we work mainly through groups rather than through individuals because it is so much more easy and effective to do so.

Association Principles Applicable Elsewhere. The village association described later are the villagers' own—of the villagers, by the villagers, for the villagers. This experiment has been carried on long enough—some of the associations are now over 25 years old—and in so many villages that it may be said to have passed beyond the state of experiment. The principle it has revealed and taught as well as the form and method it has developed and proved effective can be copied and used in other parts of India and in other countries.

There seems to be nothing peculiarly different in our West Coast people to warrant their having a permanent monopoly of such village associations and their benefits. Individuals from distant parts of the country become strong pillars in some of our associations. It is easy to say 'conditions are different', but the chief real reason why there are few such elsewhere seems to be that few have yet enlisted leaders in the villages of those parts and traind them enough in the principles of association conduct for community service.

If I were placed for work elsewhere I should certainly attempt to set up some simple organization to do what our associations do here. If they could not be the same I should try a simple committee system or co-operative organization rather than try to get on dealing only with

[1] Cole, *Social Theory*, pp. 184-92.

individuals. It is agreed that we have more Christians here. That has helped; but it is not essential to have so large a percentage. The same principles of structure and conduct can be used by movements within the different great religions, by boards of different denominations, by the great social movements now working for reform, and even by the various state and provincial governments in certain of their endeavours. In fact, in our own area one of the greatest encouragements has been to see similar organizations spring up among various religious and racial communities, using a similar name and as much of our methodology and construction as would suit the purpose and ideas of the particular society. The furthest-known reach of this influence is the plan, put into operation, for forming similar village associations throughout the seven divisions of Korea, which plan was influenced by and instigated after a study of our Travancore and Cochin associations.

Remunerative Work for Waste Time

The great numbers of people sitting about idle is an ever-impressive sight in India. The phenomenon is striking when thought of in comparison with the small numbers of such in other countries where in normal times an idle person is looked upon as a social disgrace and an economic delinquent. We have in India both unemployment and under-employment, and it is the latter that so vitally concerns the rural people. Any means whereby under-employment may be changed into something approaching full-time employment will be a great economic asset to the villagers.

Subsidiary Cottage Vocations[1] can be this asset. The reason we need them is poverty—that is, insufficient income

[1] 'Industry', generally referring to large numbers of workers congregated together, seems not quite a fitting term for occupation in homes; and it is hardly acceptable to the sensibilities of the Indian people who desire their country not to be industrialized. I therefore prefer the term Cottage Vocations which Dr T. H. Eaton, author of *Education and Vocations*, tells me is correct usage.

from a main industry. The reason these auxiliary sources of income are peculiarly feasible for our rural Indian people is the abundance of unproductive spare time they have. Small size of holdings, and the various conditions of life and servitude, make it quite impossible for a large percentage of rural families to maintain themselves adequately, without extra sources of income.

Waste Time. Where each worker has only 2.215 acres to cultivate,[1] a part of the explanation of the poverty of the people lies in the fact that this amount of land cannot employ a man for more than a comparatively small number of days in the year. He works steadily when he ploughs the land and puts in his crops, and again at harvest time, but for the most part of the year he has little or nothing to do. The cultivator with not enough to do to fill his time, still knows no other revenue producing work to which he can turn his hand.

It is officially reported to Parliament that 'the cultivator in many provinces of India is obliged by climatic reasons to remain idle for more than one-third of the total working days of the year'.[2] Here are some of the reliable survey estimates of the average number of days of work done by the cultivator: in the Punjab—not more than 150 days in a year;[3] in the Madras Presidency—on one-crop land about five months, on two-crop land about eight months;[4] Punjab —157 days;[5] Bengal and United Provinces—not more than seven months;[6] Bengal on other than jute land—three months hard work and nine months idleness; cultivator growing jute as well as rice—an additional six weeks work in July and August.[7] And in Travancore and Cochin our studies have shown us that here, as in other parts of India, there are periods when all the members of the rural family

[1] See *Census of India*, 1921, Vol. I, pp. 244-5.
[2] *India*, 1923-4, p. 197.
[3] Calvert, *Wealth and Welfare in the Punjab*, p. 245.
[4] Slater, *Some South Indian Villages*, p. 17.
[5] Lucas, *The Economic Life of a Punjab Village.*
[6] Das, 'Wastage of India's Man Power' (*The Modern Review*, Calcutta, April 1927, p. 399).
[7] Jack, *The Economic Life of a Bengal District*, p. 39.

are busy in the fields, and other prolonged times when the whole family is idle. There is much time going to waste and much scope for some form of secondary occupation.

Authorities all over India tend to agree with us that one of the remedies for poverty in India is cottage vocations. But the answers of the Agricultural Adviser to the Government of India when questioned by the Royal Commission on Agriculture were surprisingly indefinite as to the progress of such vocations in India.[1]

In other chapters I tell about the cottage vocations which are being introduced and encouraged by our Rural Demonstration Centres and our extension programme and of such help as they are already being to the poor people. Our principle, adopted after experience, is that in general it is better to improve existing industries in any particular locality than to introduce any entirely foreign ones. Those to be improved and multiplied may exist in a very poor

[1] The questions and answers were as follows: 'Do you know whether any Government has attempted to find out the actual economic value of such industries as are usually mentioned, such as bee-keeping, poultry, or sericulture in the list of subsidiary industries and to demonstrate that particular industries are suitable for the adoption of the cultivators of this country?—They have done very little work, I think, in poultry-keeping in any part of India except in the United Provinces.

'And has it been definitely proved that it would be an economic asset to the ordinary cultivator?—I think there are reasons that lead us to believe that these industries could be introduced with advantages to the cultivator.

'In order to introduce them and to convince the cultivator, was any attempt made to your knowledge in the provinces to show how bee-keeping, or sericulture, or poultry-keeping helps people?—I think so. In Bihar and Orissa the Department of Industries has done a lot to encourage sericulture and the manufacture of silks as a cottage industry.

'In your opinion Provincial Governments are establishing some such model subsidiary industries in certain suitable places for the benefit of cultivators?—I think so.

'Have you advised the Provincial Governments to carry on such model industries in certain places, for instance in Madras and Bombay, and has it been taken up?—You must remember that the Agricultural Adviser is not supposed to interfere with or give advice to the Province unless he is asked to. If I were to advise the Local Governments, they would probably resent my offering advice.

'It would be desirable to advise them?—Yes it would.' *Royal Commission on Agriculture, Evidence*, Vol. I, Part I, p. 113.

and unprofitable form, but with even that much of a basis success is much more certain than with an entirely unknown introduction. We are not furthering an exhaustive list of vocations as it is better policy to concentrate on a few, thus being able to do them better.

We must not stop with any of these until we have taught the people how to produce a really superior product and have worked out a co-operative marketing arrangement for it. I have seen rural people very puzzled and discouraged when they have learned to produce a better commodity, but have not found a market that would pay the higher price the better commodity was worth. To my mind this stopping short of co-operative marketing is the most common sin of the rural up-lifter and of the co-operative departments in India. They and those for whom they labour will never know the joy of full accomplishment as long as they stop short of co-operative marketing.

We do not pin our faith to a single cottage vocation, as does Mr Gandhi, who speaks of hand-spinning as 'the only Cottage Industry',[1] though we encourage hand-spinning and have taught it. Not all individuals and families take kindly and naturally to any one vocation. They must be able to choose; and most families ought to have more than one cottage vocation in addition to agriculture. Adding only one may still leave the family with less than a living income. As we have said, the Indian villager needs several avenues of self-help rather than a single one. He needs to be surrounded with methods of self-help.

Co-operation between Government and Non-Official Agencies

Provincial and State Agricultural Departments have expressed their appreciation of our aid in taking to the people features illustrated at their demonstration farms. As practical, social and economic servants we consider this an important part of our work. The Government may

[1] Title of two articles by Mr Gandhi in *Young India*, October 21 and 28, 1926.

have a poultry farm and a cattle farm; it may have them for years, and the regret of its officers is, they say, that so comparatively few of the really rural people have taken to either the cattle or the poultry. Even when a wealthy gentleman farmer takes some of these better animals it does not bring them very close to the people who need them most. Government demonstrators may have enthusiasm for their work, may be industrious and faithful—still, officialdom is a hindering thing, and red-tape easily makes a difficult tangle. The official finds it hard to get really close to the hearts of the people, and the non-official worker has the advantage.

In the ideal co-operation which I am so keen about, the non-official agency creates the favourable atmosphere and the relative confidence and then calls in the Government experts to help with the demonstrating. This sort of suspicious questioning is found to be in the minds of rural people concerning official Government aid: 'If the methods they recommend help us to better income, will they only tax us the more ?' (we found this fear when making our surveys) ; and 'Government has plenty of funds, why does it not go ahead and make these improvements it wants us to do for ourselves ?'

How the villagers lean on the Government which has shouldered so many of their responsibilities ! They have become so weaned from self-help that they even exhibit great backwardness in adopting and carrying out those benefits which a Government illustrates for them.

The true aim of state-aided rural enterprises should be to make the rural people and their institutions independent of state-aid, able to take care of themselves, able to walk alone without leaning on the Government. Direct commercial state-aid is generally harmful to the farmer. Lakhs and millions of money have been squandered through it in various countries.

Our Travancore and Cochin Governments and some of the Indian Provincial Governments practise one of the wisest forms of state-aid in giving subsidies to certain non-official

ventures to enable these non-official and local bodies to finance useful service projects and institutions which come up to a specified standard. I refer to subsidies for conducting schools, especially night schools; weaving schools; student hostels; subsidies towards the cost of keeping seed-bulls for community use; subsidies to libraries, exhibitions, etc. Government officials have made frank admission to me that they recognize that some non-official bodies with their intimate contact with the people can run some of these projects more successfully than Government and certainly much more cheaply. It should not be hard for Government to see the business wisdom of giving a grant of Rs 300 to a non-official Demonstration Centre to help it run an exhibition, rather than to spend Rs 5,000 on running one themselves which they admit is no better exhibition. They admit that the subsidy is given on a business basis, just enough to enable the receiving organization to run the projects or institutions—enough so that they may not have to be dropped entirely.

I agree with this policy, and also that subsidies for some purposes should be on a downward sliding scale, and not be continued longer than necessary. With all thankfulness we receive such assistance, and Government should not feel that it is in any way condescending to do us a favour. Our work is helping to further the same objects for which Government is working. Dr Kenyon L. Butterfield has asked in this connexion: 'Where else could Government get such devotion and skill at the same cost?'

Such subsidies as I have mentioned above are an aid to local initiative, to self-help and growth, to institutions of the people, for the people and by the people; and I believe the Indian Governments should increase aid of this kind. The history of rural state-aid shows that when given for purely educational purposes—including agricultural extension and vocational education—it has been a marked success.

CHAPTER III

THE PROBLEM OF LEADERSHIP

Without a Shepherd

The especially favoured boy in the Indian village, who goes on to high school and to the distant college, never comes back to live and work in the village. Though he will keep his connexion there and visit his kinsfolk and old home, the village cannot support him in the way in which he has learned to live, and cannot pay him what he can command elsewhere. Through his good fortune the village has lost another of its few leaders. Some of the leading men I know in the cities come from the roadless villages. The villagers are proud of these distinguished sons; they talk about them and look forward to their returning sometime for a few days' visit.

The ordinary man finds it very difficult to do any leading in his home village. His poverty and lack of education alienate him from that prestige which is necessary for leadership; and caste tends to confine his association and influence to a narrow circle. In all his weakness, he, who has the urge to serve through leading, faces the seemingly almost insurmountable situation of rural poverty which I have outlined in the opening chapter of this book.

Writers on rural India have hardly touched this problem of rural leadership. The triumphs and helps of science have scarcely reached the Indian village. Illiteracy, lack of education designed especially to improve rural life, and long absence from the practice of initiative and self-help, make the number of those fitted to lead in any truly village very few indeed.

The leader finds to be a handicap even that blessed contentment, which is one of the great lessons India has for the world. 'There is no desire for a better, more comfortable living,' writes Mukerjee. 'The village communities are the most complete and the most contented in the world.'[1] The contentment is not complete, fortunately, and the hungry man and his hungry family even in India certainly have a desire 'for a better, more comfortable living', for more to eat; and it is this desire that is making the response to leadership for economic improvement comparatively encouraging. The hungry man with a hungry family, no matter how uneducated, senses maladjustment; he is not satisfied with things as they are. But it is not enough for him to be aware of this maladjustment. He must know how to overcome the difficulty.

I find that there is in the Indian village a desire for at least comfortable circumstances, though there is, of course, no desire for, or knowledge of, that high standard of living which certain western peoples have come to require in order to be happy. What is often interpreted as lack of desire for better things, is more the effect of uneconomic tradition, and especially of hopelessness as to any chance for better things. Accepting the theory of *Kismet* or *Karma*, there is too willing resignation to fate with a religious conviction that it is the part of righteousness to be resigned. This too the leader has to face.

If the desire is not there the leaders will have to create it. This creating is a possibility. It involves educative change. The leader in Indian improvement may not expect any considerable success until the desire is there. The people must be brought to that state where they really believe in the projects, methods and practices proposed. The influence of desire in bringing about the acceptance of an idea is exhibited by all men and it is far greater than that of logical processes. We believe what we want to

[1] Radhakamal Mukerjee. Quoted by Keatinge in *Agricultural Progress in Western India*, p. 169.

believe to a far greater extent than we realize or are willing to admit.

Are the Poorest Worth Bothering With? Some practical persons tell me that we must be hard-hearted in the interest of the larger cause of India, and realize that there are millions in India who are so far down that they are practically irretrievable; that we cannot afford to bother with them, but should give our attention to the classes already more fortunate, and lift them. If any of the poorest can profit by the example of the increasingly profitable practices of the upper classes, well and good, but don't waste time on them.

The census, just completed, shows a teeming population of 353 millions. If a third of the people of India are underfed (and we should rule out only one-third of this poor third as hopeless), that would mean about 39 millions of the most destitute of people (equal to some one-third the population of the United States of America and approximately the whole population of England) left to get through this life without any programme for their betterment. They are the class least able to do anything to help themselves or have leaders of their own. Like the masses everywhere, they crave leaders to venerate and follow.

Both Long-time and Immediate Plan Necessary. I not only would help the poorest to help themselves but would train them for leadership. These millions live today—they are producing at least as many of their kind for the next generation. The policy I so heartily believe in, of putting emphasis upon the young—the men of tomorrow—should be followed. In any village one can see that the poorest people do not copy very rapidly from the more fortunate upper classes who set up such caste barriers between them. As some of the Indian gentlemen who have made village surveys have pointed out, upper caste men even persecute members of lower castes for adopting new ways and trying to rise to a better state. We should have an immediate plan for these great numbers of poor people, not neglecting a careful long-time policy of schools and

colleges and out-of-school ways for the more fortunate youth of India, who by their advantages of heredity, upbringing and material means are certainly better able to take places of leadership and great influence and to build for the future better state. It is strategic to train these.

Work With and For the Whole Community—That is my policy. Enlist leaders from all sections, rich and poor, educated and unlearned, Brahmin and outcaste. The co-operative method demands this. To my friends who tell me that there is no use working with the poorest, that we should confine our attention to the well-to-do upper caste men who, they say, are keeping the poor down, that we should request them not so to persecute their brothers, I reply that these well-to-do upper caste men cannot be expected to accept our advice until like themselves we have done something for and with the poor. They say: 'The poor we have always had with us—we know their needs perfectly.' To bring all castes into a programme of whole community improvement, with emphasis for the poor, is the way; and it is fully possible.

It is in no sense hopeless to train the depressed and unfortunate. Participation in such training is among my pleasant experiences, partly because of the appreciation and joy those who have been deprived of their birthright show in growing ability and greater but still small possession. Some of our leading men in our State and in India proper are up from these depressed classes; and I predict that in the next fifty years we shall see whole communities of the depressed going ahead of some communities who now feel superior and are resting on their oars, so to speak. Even slow response to our pioneering and imperfect methods would be no sign that progress is hopeless. Rather, that fact should challenge us to further study that we may know how to teach more wisely.

Hit-or-miss methods of training, too often followed, are not profitable for either the poor or the more fortunate. The immediate programme should be an integral part in a

studiously and scientifically planned long-time programme with definite aims and goal.

Some of our leaders come from the more fortunate. Looking over the honorary, unpaid workers in our associations in over one hundred rural villages, we see that the class most prominent among these leaders is that of rural school teachers. Senior high school students serve in considerable numbers, and there are many young men of the land-owning and business classes, rural pastors and catechists. Some of the landlords, vakils, managers of private schools, medical practitioners and Government officers are included.

The Two Sources of Rural Leaders. The Indian village needs two kinds of dynamic leaders: (1) those from within the village group actually belonging to the group; and (2) other persons who, sympathetic with the needs of the village, will associate themselves with the villagers as expert counsellors and fellow workers. In the chapters on 'Tackling the Problem of Leadership' we consider these two types.

Both these types of leaders need to be intimately associated with the village, knowing and understanding the people and village conditions very well. They must be in touch with the currents of human life where they are to lead. The leader from within the village group will have the advantage in this particular. Our Indian Rural Secretary within the Demonstration Centre Area builds up his knowledge and intimacy in respect of the villages and the people of the area. The non-Indian, like myself, can only attain this relationship by closest association with the people, and much dependence upon his Indian colleagues, who are in a position to sense undercurrents of thought and sentiment more readily. The leader must be in tune with the environment of the particular village, must have studied it and lived in it. The leader must know two things accurately, namely, the people and the cause he is leading.

The villagers need the brotherly assistance of this second

type of leader especially in the forming of a programme. If there is any programme in the mind of the Indian villager it is in a hazy and unworkable form. Indefiniteness may be stated as an indigenous trait. To let things take their course, without thinking them out beforehand, is the more indigenous tendency. Anyway it is true the world over that 'programmes do not invent themselves in the mass'.[1]

This suggests again the need of the leader knowing intimately the situation in which he leads. In the Indian village we have the situation where the group is only vaguely conscious of the need. Whatever the needs for adjustment may be they should be defined. Leaders need to make surveys such as I describe in other chapters. Where the need is not obvious to the group, facts bearing upon it should be collected in order that the data may be available not only for showing just what causes the need but for making this need clear to the lay group. The leader needs this information. There are too frequent examples in India of 'the blind leading the blind' with stumbling results.

Personal versus Indirect Leadership. The static leader, that is the one who goes on practising better ways and methods and inspires others to copy him without his thinking of leading, has his influence handicapped in the Indian village and will continue to have until the villagers can read more. The dynamic leader working for general uplift is also handicapped because he cannot use literature to any great extent. In America, agricultural and rural life information has been disseminated largely through the farm press,[2] and many changes in agricultural practices have thus been brought about. This has been to a large extent true in certain European countries.[3]

When our villagers learn to read, this method ought to be very effective, for at least in our part of India there is

[1] Lippman, *Public Opinion*, p. 243.
[2] The *C. B. Smith Surveys* bear this out.
[3] Read Thomas and Znaniecki, *The Polish Peasant in Europe and America.*

a genius for publishing. With only 27 per cent of the people of Travancore literate there are scores of newspapers in English, Malayalam and Tamil in the State. The editors are very courteous in their willingness to print useful information. Dissemination of knowledge through the press has great promise for the future. Even at present our common people can get more from it than the people of China who are only now having invented for them a written form for their spoken language.

Some of our night schools use a system [1] of teaching boys and adults in the shortest possible time to read and write and to do simple arithmetic. Within a year from commencement students are able to read the fourth reader and the vernacular daily paper quite well. The ages of the students so learning range between seven and forty-five.

For the present, however, leadership in rural India will have to be carried on very largely by personal contact of the leader with the led. In this we are not so badly off as might be supposed, for personal face-to-face leadership is by far the most effective kind anywhere. 'Only the more literate and abstractly thinking person gets any very considerable share of his behaviour pattern through literature.' [2] Even when we do, we are responding to the personality behind the printed page, which makes the lighter literature such as drama and fiction more influential than that designed to teach method of life and practice.

Self-Help Leadership Difficult. There is one more difficulty in the way of leadership in our programme. The more direct or concrete help a leader promises or gives the more easily will enthusiastic followers respond. We do not give away many things outright; we teach rural people how they can help themselves. Charity is more eagerly received than philanthropy. Some kinds of philanthropy are more eagerly received than that kind which gives methods for self-help. Abstract benevolence such as self-help does not appeal to many. The self-help leader

[1] Known, after the inventor, as the *S. C. Daniel System.*
[2] Bernard, *An Introduction to Social Psychology*, p. 547.

may be idolized in the next generation, but he is not likely to be in this. In India we see many examples of leading by easier methods which in permanent results are little better than waste of time and effort.

The problem of leadership in the Indian village is a fascinating one, especially to those fortunate ones of us who have the privilege of actually engaging in the leading there.

CHAPTER IV

COTTAGE VOCATIONS

To relate sound economics with that wholly worthy desire so deep in the hearts of our Indian people—to keep India rural—we must have a larger part of the people off from the land. This will be even more true when we increase production by better agriculture and live-stock. We must have a good part of the people working other than in production of food. We must have good numbers to serve as consumers of products raised by those still on the farms. Avoiding the evils of large city industrial conditions, small village industries seem to me to be the golden mean between extreme ruralism and industrialism. They would enable most of their workers to live in the villages still, and under essentially rural conditions.

During the coldest part of a recent winter when the seas around Denmark were frozen and there could be no traffic in or out of that country, I saw how in the folk high schools both youths and adults were improving the slack season in learning how to carry out profitably the cottage or small business industry. Four-fifths of all the industries of Denmark—that country now so often held up as the example of prosperity—employ fewer than five workers each.

Hand-Weaving. So, although we write especially of hand-weaving as a subsidiary vocation in scattered homes, we are also deeply interested in our weaving villages. A study in the village of Mallur found sixteen families working mostly with common country looms. Weaving at the time of the study was doubly depressed, by the

shortage of dyes and consequently of dyed yarn, and by the fact that plague was raging all about, and the market was in consequence somewhat disorganized. The earnings of a weaver were at that time scarcely better than those of an agricultural labourer, which averaged about five annas per day. This was unusual. Elsewhere it is found that weavers earn more than agricultural labourers, and this is one of the most striking witnesses to the remarkable vitality of hand-loom weaving in India.

For centuries India was the home of cotton manufacture. The very name calico tracks it to Calicut as the port of distribution. Until the 18th century, it was India that supplied Europe with the cotton she used. Spinning and weaving were subsidiary cottage vocations which helped Indian agriculture to thrive. It was in a country so conditioned that the competition of Lancashire machine-made cotton was allowed to crowd out India's chief cottage vocation. A great amount of suffering and poverty followed, 'for, unlike England, agriculture had to continue to be the livelihood of the great majority of India's population, only an agriculture which, robbed of its subsidiary industries, could never again offer more than a bare subsistence'.[1] In 1913-14, India took back from the looms of Great Britain alone over 1,750,000 miles of cotton cloth.

Advocating, for the present age, a loom in every Indian house, we would encourage the various members of the family to learn to operate it. The wife, bigger daughters and even fairly young sons of the home can operate the loom for a reasonable time each day without physical injury. Weaving goes especially well with agriculture to employ those seasonal and climatic periods of inactivity which are usually spent in idle unprofitableness. It is a process which can be taken up and left off at any time and at which all members of the family can assist. It requires little capital and its products can be used within the family or can find a ready market. The initial outlay for the loom can be recouped in a year or two and after that there is

[1] Holland, *The Indian Outlook*, p. 157.

sheer profit. Through our co-operative societies even the very poor man or boy of character can borrow to get a start with a loom and immediately begin paying back the loan through cloth sold. The Census and other studies of India give commendatory evidence to confirm our experiences as to the suitableness of weaving as a cottage vocation.

The hand-weaving industry with all its great promise of helpfulness to our rural people holds out that promise only when it is kept in its proper setting, in the family home. Even in weaver villages the looms are in the homes. It is essentially a cottage-subsidiary vocation. The writer of the industrial section of the last Madras Census Report speaks of experience which bears this out. 'The attempt to organize the hand-loom industry in small factories has definitely proved a failure chiefly owing to the indolence and indiscipline of the workers, though such factories would greatly reduce the time taken in preliminary processes.' He mentions that with the laborious method of warping and sizing, now much used, the average out-turn of the hand-loom weaver does not much exceed 100 pounds of cloth per annum, but that the popularizing of the fly-shuttle is increasing the output.

Experience has caused us to build this project also on the underlying principles brought out in the observations of both the last two Census Reports, that 'the future of the hand-loom industry depends almost entirely upon the improvement of the weaver himself'. We put him in the way of improvement for body, mind and spirit and surround him with other benefits—other self-help methods.

The Most Talked About Cottage Vocation. As to spinning we have encouraged it as a companion vocation to hand-weaving to use spare time energy that would otherwise be non-productive. Since it, like the hand-loom, uses the available mechanical energy of a man, woman or child for providing material goods, Richard B. Gregg writes that the *charkha* should be considered a machine. Though in a different degree and manner, the process is the same as that occurring in a steam engine or hydraulic-power plant,

namely the transformation of solar energy into mechanical motion. The great number of idle and unemployed Indians are, in effect, engines kept running by fuel (food), but not attached to any machines or devices for producing goods. When we, Mr Gandhi and others hitch up the idle *charkhas*, we save an existing waste of solar energy. To answer the growing claim that the use of mechanical power should be increased in India, this is probably the quickest and cheapest way. The 'engines' are all present and spinning and weaving machinery is either ready or can easily be got ready to hitch to the men, women and children who would thus be as efficient transformers of fuel energy into mechanical motion as are steam engines.[1] Enthusiasts of spinning recommend widespread turning to it as the wisest next step' in India's advancement.

Reckoning that a man's work is usually one-sixth to one-tenth of a horse-power, then, being very conservative and using the lowest rate, one-tenth, Gregg figures we have available for work in the agricultural districts the equivalent of 10,700,000 horse-power. If one one-hundredth of each person's power were employed upon the *charkha*, he finds that this would give the equivalent of 107,000 horse-power available for *charkha* yarn production in the agricultural districts alone. During the three idle months of the agricultural year the amount of man-power available for *charkha* spinning would be about equivalent to the entire manufacturing energy of the great industrial section of Bombay in 1919, or the entire output of the Tata Hydro-electric Power Plant, or approximately twice the total power being consumed in Bombay textile mills.[2] Personally *I should like to see most of this power hitched to the best hand-looms rather than to charkhas*, for the result in valuable product and income for the workers would be several times greater.

I give the eleven special features which Mr Gandhi says render hand-spinning 'pre-eminently suitable as a remedy

[1] *Economics of Khaddar*, pp. 15-19.
[2] ibid., pp. 18-25.

for India's present economic distress'. The reader may be surprised that the features named by him are entirely non-political. The other cottage vocations we are sponsoring embody these features to a greater or lesser degree. Mr Gandhi's points for the suitability of the *charkha* are :

1. It is immediately practicable, because :
   (*a*) It does not require any capital or costly implements to put into operation. Both the raw material and the implements for working it can be cheaply and locally obtained.
   (*b*) It does not require any higher degree of skill or intelligence that the ignorant and poverty-stricken masses of India possess.
   (*c*) It requires so little physical exertion that even little children and old men can practise it and so contribute their mite to the family fund.
   (*d*) It does not require the ground to be prepared for its introduction afresh, as the spinning tradition is still alive among the people.
2. It is universal and permanent, as, next to food, yarn alone can be sure of always commanding an unlimited market at the very door-steps of the worker, and thus insures a steady and regular income to the impoverished agriculturist.
3. It is independent of monsoon conditions and so can be carried on even during famine times.
4. It is not opposed to the religious or social susceptibilities of the people.
5. It provides a most perfect ready means of fighting famine.
6. It carries work to the very cottage of the peasant and thus prevents the disintegration of the family under economic distress.
7. It alone can restore some of the benefits of the village communities now well-nigh ruined.
8. It is the backbone as much of the hand-weaver as of the agriculturist, as it alone can provide a stable and permanent basis for the hand-loom industry

which at present is supporting from 8 to 10 million people and supplies about one-third of the clothing requirements of India.

9. Its revival would give a fillip to a host of cognate and allied village occupations and thus rescue the villages from the state of decay into which they have fallen.
10. It alone can insure the equitable distribution of wealth among the millions of inhabitants of India.
11. It alone effectively solves the problem of unemployment, not only the partial unemployment of the agriculturist, but of the educated youth aimlessly wandering in search of occupation.

It appears that Mr Gandhi puts too much hope in hand-spinning. In all history, as far as I can discover, no one simple process has ever done for a great nation all that Mr Gandhi thinks this one could. No one process can be a panacea for India's troubles. The claim is directly opposed to my argument for comprehensiveness. *There is no doubt, however, that our several cottage vocations together, can do much of what he believes the spinning wheel could alone.* But it should be remembered that even he has never recommended hand-spinning as a principal occupation. 'It is offered to those who otherwise waste their time in idleness.'[1] We have taught spinning to a good number and our disappointment is that almost none of them continued to spin. This is because the product of a long day's work, unlike that from the hand-loom, is worth so very little.

We therefore treat hand-spinning as only an auxiliary to hand-weaving. The *charkhas* are cheap (Rs 3 to Rs 5 each). Practically every family can have them. And as I have said, we should like to see a loom in every rural home. Raw cotton grown in South India can be bought in the local market. Yarn can be spun for the family clothing. This gives us a foundation for a situation like that which Horace Bushnell called 'The Golden Age of Home-

[1] Gregg, op. cit., p. 170.

spun which America had before that country's industrialization.

But purely economic (non-political) considerations do not require that all the yarn to be woven should be hand-spun. That should depend on the type of cloth to be made, the availability and prices of yarn and thread. Either the home-made or the purchased yarn and thread is woven into clothing and cloth for house and family use; and extra cloth made finds a ready local sale in our area at good profit. We can also help the villagers to a co-operative wider sale at enhanced prices. Khaddar cloth shows its hand-made characteristics which are attractive to the European and are beginning to be appreciated by Indians. Looms should have the improved fly-shuttles, whether they are fitted to pit looms, which are cheaper, or frame looms. The fly-shuttle loom is 50 to 100 per cent more efficient than the primitive type.

It is true that a family can find entire support from weaving if necessary. Weavers generally make better daily wages than farm labourers, but the farmer-weaver of course, may not be as efficient as the full-time weaver. While in England recently I was interested to see, even there, a marked revival of hand-spinning and weaving as cottage industries for English farmers, especially during the slack winter months. There they are setting an example for India by trying to find the best methods and equipment as they existed when this handcraft was at its very height just before the turn to machine methods. In Devonshire I saw them trying to perfect a spinning wheel on which one man, turning one handle, could spin seven threads at one time. If Mr Gandhi and his followers could give us a better *charkha*, hand-spinning might rise above an occupation profitable only for that time which would otherwise be absolutely wasted.[1]

Gardening. Various writers state that the rural

[1] Rs 100,000 or £7,700 has been offered by the All-India Spinners' Association (Mirzapur, Ahmedabad) as a prize to the inventor of such a *charkha*.

dwellings of Travancore and Cochin are generally surrounded by gardens.[1] The imagination is apt to create an exaggerated picture from this oft-repeated statement. In reality, one of the conditions that strikes one is how bare is the space around the majority of houses. There may be a few random jack or coconut trees, and plantains or other plants, but a carefully planned garden which would yield a steady supply of vegetables and fruits is a rarity.

One of the objects of my recent study in the Philippines was to get helpful information for our Indian demonstration and extension work in gardening. I went there because there was probably no other place so similar to India where so much had been done in rural education. I am hopeful that the Indian schools will also take up school gardening and encourage home gardening. The object of the school and home-garden work is to improve the food supply of the community and increase the income, intelligence and efficiency of the farmers and other rural people of the present and future. Our aims in teaching gardening are several, but a primary one, which I found emphasized in the Philippines also, is the bringing about of a more healthful standard of living through (1) a more abundant food supply; (2) a greater variety of food; and (3) food of better quality. The poor rural people also desperately need the greater income these can bring.

Our work in India is more with boys in their out-of-school times and with adults, but it is essentially educational. Through these boys and men engaged in gardening, principles can be taught and mastered that will be of great value to them when dealing with the broader phases of agricultural work. In their gardens these friends first try some of the seeds of new and better field crops.

When school gardening comes, the above-mentioned aims can be accomplished by our emphasizing these four

[1] Mukherjee writes of gardening in India: 'Indeed, the primeval hand labour garden crop, which is Asia's great gift to the world is the mainstay not merely of the endurance and home-spun prudence for her teeming millions but also of the peaceful settled habits of her abiding communalistic civilization.' *Regional Sociology*, p. 271.

features: (1) instruction in the fundamental principles of gardening and plant life; (2) the demonstration of these principles in the school garden; (3) their application at the pupil's home, involving productive work in the home garden; and (4) the giving of definite credit for the supervised work both at school and at home towards the promotion of the pupil.

But in India enthusiastic leadership is needed for this enterprise as for all others. The Agricultural Adviser to the Government of India expressed this in his answer to the Royal Commission, who asked: 'Is there any local interest in the school garden?' The answer was: 'All reports about school gardens, I am afraid, are very disheartening. It is only when you have a real enthusiast in charge of a district, like Mr Freemantle of Allahabad, that the school garden succeeds.'

I think that at the heart of every movement or project that is succeeding in India we can find a 'real enthusiast'. No doubt he is an even greater essential in the tropical Orient than elsewhere.

When we come to telling the story of our activities in the Martandam Demonstration Area it is the intention not to interrupt the account of what is being done with reasons for it. In telling what is happening in the development of such other cottage vocations as poultry-keeping, bee-keeping, jaggery refining, goat and cattle breeding, we believe the need for them and the reasons why they can help India up from poverty will be quite evident without

CHAPTER V

TWO METHODS

Demonstration and Co-operation

A beautiful White Leghorn cock proudly surveys his flock of a dozen busy, healthy, crimson-headed laying hens. They are the joy of the village family who live in this modest little thatch and mud hut. Try to buy one of these hens. 'No,' the village man says, 'why sell any of my hens? I sell big eggs through my co-operative society at high prices.' The Indian villager is wiser than was the owner of the goose that laid the golden egg.

Their Neighbour's Influence

A progressive village family like this, which makes success with any of the projects we are teaching, is a demonstrator *par excellence*. The neighbours say, 'Here is a family like ourselves. What they are doing profitably we can do.' This demonstration is copied where one at a Government farm or even at our Centre probably would not be. I can show you where whole villages miles from our Centre have become interested in better poultry, through a single successful pioneer family in each village.

The discovery of the demonstration method for rural improvement is one of the greatest contributions to agricultural science. It is not only a discovery of a new rural truth, but of a new way of disseminating all the vast treasures of truth that others have developed. Demonstration is the most effective of all teaching methods.

The Martandam Rural Demonstration Centre and its

extension service described in later chapters constitutes a two-part experiment in this method. As we use it, it is the method of seeing and doing. The learner sees helpful practices illustrated at the Demonstration Centre, or in his village, at his own home or at the home of a neighbour; and he is given opportunity actually to have a hand in—to do the thing—himself. The form of demonstration we find by far the most effective is where the learner demonstrates to himself and to his neighbours at his own farm or home a project or method, with the help and direction of the demonstrator (in our case the Rural Secretary).

When he originated this method in the Southern States of America, the farmers heard from Dr Seman Knapp what others had been saying for many years. But these others had been crying in the wilderness of ineffectuality while the new method actually touched springs of action in the man behind the plough. The agricultural principles he taught were not often new; but it was new to think of going to the farmer and demonstrating before his very eyes. Some excellent poultry farms, cattle farms, and other places of experimentation are maintained by the various Provincial and State Governments in India. What a pity though if the treasure of knowledge built up in these places has not an effective method for its dissemination and if it is a closed and distant book to the men in the fields!

In all forms of demonstration, the aim is that the learner shall get so clearly in mind an idea of how to do the job that he can go ahead successfully and by actual practice become skilful. The demonstration should provide a good opportunity for the learner to see how the job is performed; and a good opportunity to come to feel what the performance is, through doing it himself. Demonstration requires a teacher who can do the job and do it well; one who knows the several details of the subject and what they mean. The successful demonstration has a marked effect upon the morale of those being taught. The unsuccessful

demonstration also affects the morale to the extent of being positively dangerous to successful teaching and influence afterwards. Through a successful demonstration, an idea previously only half-believed may be accepted for its full value; but through a faulty demonstration, it will probably be rejected entirely even though true.

Demonstration is used in connexion with teaching how to do something. In Malabar there is extreme fondness for being lectured to; but I think the lecture alone is of little use in teaching a process of action. The demonstration may be considered as the form of illustration used when learners are to be made familiar with a process rather than with a thing. Time and energy can certainly be saved by the use of this method. It may prevent much unnecessary 'trial and error', and insure trial and success.

For the best illustration of the triumph of the demonstration method in the uplift of agricultural peoples in need, we look across to the Southern United States, where the misfortunes of the rural folk inspired Dr Knapp to develop a system which was to redirect the whole agriculture of the south, and to institute an educational method, which, spreading over that whole country, laid the foundation of what is today called 'the business of agriculture'.

When the Mexican boll weevil began its depredations on the Texas cotton fields in 1902, Dr Knapp had just returned from research in Porto Rico. This invasion of the foreign pest was so serious that the country had become alarmed at the financial disaster that followed its progress. As it advanced panic and ruin ensued, and it seemed in 1903 that the whole cotton industry of the south would be destroyed unless something could be done to exterminate the pest, or at least stay its progress. In spite of the fact that he was then 70 years of age Dr Knapp with the backing of the National Department of Agriculture created what was named 'The Farmers Co-operative Demonstration Work'. It was to have vastly wider scope than to combat the boll weevil menace.

The cause of the trouble in the south was not by any means solely the 'foreign invader'. There were many features similar to the causes of poverty in rural India. These lay further back in the many wrong practices, or lack of practice, in agriculture. The first steps were to organize a working force and to secure the co-operation of the general public. Farmers' institutes were held, lectures were given on cotton, cotton insects, corn, forage crops, fruit growing and other farm crops and operations. Farmers were secured who would try out the new plan of teaching by the five to ten acre demonstration plot method. Something over 7,000 farmers pledged themselves to cultivate a few acres each under the supervision of these demonstration agents. This is essentially the type of demonstration that the Royal Commission on Indian Agriculture have in mind when in the report of their conclusions they declare 'the method of demonstration plots generally preferable to demonstration farms'.

The gatherings of demonstration workers take on almost the nature of religious conferences, as they sense the great possibilities of making people better, happier and more prosperous through the demonstration method. In all this economic side of our service in India we continually emphasize and keep ever before ourselves, our workers and learners, that although we are teaching business method, it is the spiritual significance of the movement that is all-important. Herbert Hoover has thus stated this principle. 'Economic advancement is not an end in itself. Successful democracy rests wholly upon the moral and spiritual quality of its people. Our growth in spiritual achievements must keep pace with our growth in physical accomplishments.' [1]

Recently I had the opportunity of studying demonstration work in connexion with the Tuskegee Institute in Alabama, of travelling in the Southern States, and meet-

[1] In an address accepting nomination for President of the United States, Stanford University, California, August 11, 1928.

ing negro leaders of extension and demonstration work among their own people. I do not think there is anywhere more practical or more effective teaching for rural improvement. Come and see, for instance, a demonstration made for the benefit of the whole community at one of the most run-down negro homes. The consent to be fixed up is obtained in advance from the run-down-farm family, and all the people of the country-side are notified and invited. This proves an enjoyable event of large social magnitude as well. The people—men, women and children —come in great numbers at the appointed time to the place where the demonstration is to be conducted.

The men demonstration agents show how to (and actually do) repair the falling down veranda, the broken hinges and fences, the dilapidated poultry house, and whatever needs 'fixin' up'. Various farming method demonstrations are also conducted. Simultaneously within the house, kindred changes are taking place. The woman agent is actually performing, inside, the operations which will improve living conditions, is illustrating cleaning and methods for sanitation and the better equipping of the home. Or it may be selection and making of clothing, care of children, care in sickness. Beyond these social demonstrations, the demonstration agents go into as many individual homes as possible. As I saw the results of the Junior Clubs of negro boys and girls, I was equally impressed with the success of these young people.

Here again the significant fact is what individual farmers, directed by demonstration leaders, do on their own farms under their own conditions. Farmers are not impressed in India or anywhere else with what they see done on Government show farms, operated with public money, not intimately connected with the farmer, and not on a self-sustaining basis. But they are impressed by what they do themselves; and the demonstration agent has brought about a high degree of self-help.

The home gardening projects directed by the Educa-

tional Department of the Philippine Islands, which I went to study, constitute a large-scale illustration of the demonstration method and its effectiveness.[1] I fervently hope for the time when the schools of India will direct such work, so in harmony with the fundamental economic needs of the country and the people.

Our experience in the use of demonstration and in introducing self-help in rural India has made us adopt it as our chief teaching method. Other chapters tell how we help villagers to become demonstrators and how we use this method at the Demonstration Centre, in the Village Associations, market places, in schools, camps, churches, at the homes, farms and gardens of the people—wherever instruction is to be given.

Hand in Hand Upwards

Rural India must adopt the co-operative method to bring about reconstruction, and it must adopt it to a far more complete and comprehensive degree than is the tendency so far. The rural people must practise co-operation for not only their economic regeneration but also their moral, spiritual, social and physical uplift. All this simply cannot be accomplished through individualism.

The co-operative principle itself is not new in India. It may be said to be indigenous; it is as old as the panchayat. Prominent today, it only lives again. The same is no doubt true in Denmark; it is true in America. In his *Winning of the West*, Roosevelt tells us: 'The first lesson that the backwoodsman learnt was the necessity of self-help; the next that such a community would only thrive if all joined in helping one another. Log rollings and house raisings were occasions when the neighbours came together to do what the family itself could hardly accomplish alone.'

[1] In 1922-3 there were reported 1,500 garden day celebrations and exhibits at which 250,723 pupils and 39,114 farmers exhibited products. There were 2,511 agricultural clubs. To the people were distributed 312,772 trees and plants by 3,046 school nurseries, while the children from the school planted at their homes 1,043,189 trees and plants.

Co-operative Credit. Co-operation has answered first the call of the great need for credit. India's burden of debt is a crushing load. The question: 'Does the co-operative movement in India actually reach the peasant?' had to be answered in the negative. J. C. Jack's study in Bengal drove him to the conclusion that it would take centuries for the co-operative movement to reach the bulk of the peasantry. Slater's, Mann's and Darling's subsequent summaries tended to confirm this. When the secretaries of our Association argued that co-operative credit could be extended on a business basis to even the poorest of the Indian people who could give no material security, they were laughed at. The prevailing opinion was 'only a fool or a philanthropist will lend to a pauper'.[1]

It was necessary to demonstrate to Governments, to business, and to others that *character, alone, is an excellent basis for credit.* It is certainly as well to loan for a productive purpose to a poor man of good character as for a shady purpose to a well-to-do man who will try to evade paying back the loan, possibly making it necessary to bring an expensive and protracted law case against him. A drunkard or a slippery individual with plenty of property may prove a very troublesome debtor. 'Character is credit' is a thoroughly sound principle in connexion with unlimited liability banks and unless it is courageously put into practice there is no hope for the masses of India. Character is negotiable as credit. We are helped further in loaning to the poor in that our work in the village has the 'small town' characteristic of everyone knowing his neighbour's business. The panchayat of the co-operative society is able to weigh very well the soundness of the proposition the applicant for a loan lays before them. If it is not for a productive purpose it is refused. If the applicant's character and industriousness are not good it is refused. These men, knowing local conditions so well, judge very accurately whether it is going to enable the borrower to

[1] Darling, *The Punjab Peasant in Prosperity and Debt* (Fourth Edition), p. 13.

increase his earnings that he will soon be able to begin paying interest and to pay back the loan in small but regular instalments.

The importance of loans for productive purposes has been emphasized by Sir Edward Maclagan: 'We discern that it is not indebtedness that is the evil, but indebtedness for unproductive purposes.'[1] Holding rigidly to giving *loans for productive purposes only* makes the village co-operative work perfectly sound business. Our Rural Department secretaries, who have assisted in organizing and nurturing co-operative societies in their infancy among the very poorest people in South Travancore since 1919, can testify that these societies have not lost any money. Occasionally a very poor man has died and the society, not wishing to hold his widow for the loan, has written it off the books, but the society had a surplus fund to cover it.

Other Forms of Co-operation

There is no lack of feeling in India that there should be more of co-operation for purposes other than credit, yet eighty-six per cent of all societies are agricultural credit societies. In Travancore the Dewan in his address before the Sri Moolam Popular Assembly spoke of the 'one fundamental weakness in the movement' as 'the comparative fewness of non-agricultural societies for purposes other than credit'.

Co-operative Stores. Something of our success in co-operative marketing will be described in later chapters. In attempting to use the co-operative method in other ways than purely for credit, we tried co-operative stores in a small way without any real success. We laid lack of success to our own inefficiency, and hoped later to make co-operative stores successful. Further study has convinced me, however, that they are unsound in principle, *except in situations peculiarly favourable.* Even in America, where

[1] In Introduction to Darling, op. cit.

co-operation has been so successful, 99 per cent of all co-operative stores have come to failure.[1]

The co-operative store is too often based on wrong principles; it is formed with zeal but without knowledge; it is based on enthusiasm, not on sound commercial practices; it is usually promoted by a few outsiders, not by the rank and file of those who are supposed to support it; often it is organized with exaggerated notions about the 'big middlemen profits' in retailing and with no realizing sense of the big middlemen costs in retailing; it frequently ignores or miscalculates the fierceness of competition in retailing, and the risks involved. All these unsound principles of co-operation are illustrated in the co-operative store movement.

A co-operative store must be an efficiently managed concern with expert management to meet and surpass the competition of other business which has the very best and full attention of its managers. Unpaid workers, who in their spare time render such useful service of various forms as described, cannot give sufficient supervision to a co-operative store, and an employed manager efficient enough to make the co-operative store a success can generally command a better salary elsewhere.

Co-operative Production. The second great step in Indian co-operation should be co-operative production. Let it help us to get enough to eat. Credit can help production and when a country has practised well in production it is expert in other forms and does co-operative marketing very well. Denmark is most often cited as an example of successful co-operative marketing. This praise is merited. But as a matter of fact 90 per cent of Denmark's success is due to co-operation in production and only 10 per cent is due to co-operative marketing.[2] The Danes have based their market success on quality production. The co-operative marketing features which I later

[1] Co-operative meat packing houses have been 100 per cent failures.

[2] See Boyle, *Marketing of Agricultural Products*, pp. 31-4.

explain exist and succeed entirely on quality production. We could lose our market almost overnight by a failure in quality.

We find co-operation in some form advantageous, indeed necessary, in every extension project launched. When improved poultry is to be introduced in an area among the poorest people it is helpful that those who are to take up the new venture shall form themselves into a co-operative poultry society, that they may better work and learn together; that they may take loans in order to be able to purchase the necessary eggs, birds, housing material (very simple) or fencing to get started. For such societies, I favour simple, easily understood rules. Women are admitted to membership, and boys too. They may be among the most enthusiastic and successful members. The co-operative poultry society involves co-operative marketing. In this a check can be kept on the quality of eggs supplied by each member, and an area may build up a reputation for quality products. Danish eggs by this method rose from a bad reputation in the English market to the very highest.

Co-operative Marketing. The greatest sin of co-operation in India is the stopping short of co-operative marketing. Owen D. Young, known as one of the world's ablest business men, says: 'There cannot be overproduction in the world; what we have is poor distribution and consequent underconsumption.' Distribution of eggs in India becomes increasingly important as production is stimulated and more and more people lay aside religious objections and use eggs for food. With this problem before me, I went to China to study the system by which country eggs are collected in great numbers from the villages by agents of large foreign firms, and are brought into the city factories where they are dried or frozen for shipment to foreign countries for use in baking. This business is so large that it is credited with having been a chief factor in a $3,000,000 loss in cold storage eggs during one season in America. In spite of distance and import duties the 'China eggs' undersold the local ones in America.

Having investigated the processes of drying eggs, my conclusion was that the machinery required was too elaborate and expensive for our rural people and their philanthropic friends to establish co-operatively at present; and furthermore that if a foreign firm were induced to establish such a factory in South India, their requirements in profits would be so great as to leave not much advantage for the villagers who would supply the eggs. An interesting additional finding was that shipments of Chinese egg powder were being made to Calcutta. There is no reason why rural India cannot supply Calcutta and our other cities with sufficient fresh eggs by quick orderly shipments. To the supplying of fresh eggs we and our village friends are in an increasing measure giving attention.

Why should the Hawaiian Islands supply India with pineapples when they grow beautifully in Travancore; and why should we go on buying 'pearl' tapioca manufactured in and sent from foreign countries, when tapioca grows abundantly with us, and the price is pitifully low to the cultivator, because the only use for it is to eat it as a vegetable—a rather poor vegetable? The process of preparing it for commercial use is a comparatively simple one. We live here in the land of the coconut. Should we buy desiccated coconut prepared in other countries and sent to us? These are matters of 'expert counsel', better cultivation, method and machinery in which co-operation—credit, production and marketing, including co-operation of Government with the people and non-official agencies—can help.

CHAPTER VI

WHERE AND WHY

Choosing a Centre

THE really hungry man is of all men most interested in something to eat. Knowing that we would get the best response in self-help from people really in need, we established our Rural Demonstration Centre in the heart of an area where the people were as poor probably as any in the world. Hunger was apparent on every side. Poverty was obviously much more general here than in most other parts of our State.

If our methods would help these people to help themselves it would be a demonstration of what could be done, perhaps with even less effort, in other parts. Many would advise us to choose a more fertile section where it would be easier to make a showing and there would be more rich men to help. But we had at least the example of Denmark where, although the co-operative system was instituted for the poorest farmers, the well-to-do and even the rich had soon found it advantageous to seek admission to the poor men's societies and to share in the benefits.

We wanted a truly rural village, but on a main thoroughfare so that it would be easily accessible to the greatest number of persons; one which contained people of the different castes and creeds; which had the great typical Indian needs; which had some educated people; and one which was a natural centre to a number of outlying smaller villages. So we chose Martandam. It is twenty-five miles south of the nearest railway station at Trivandrum. While

it is not just like the little villages which lie around it on every side, it is the natural centre of the villages.

Being on a good road and bus line is the greatest convenience to our secretaries who have no cars, to the many who come to the centre, and for our marketing. The little Travellers' Bungalow close by is a great convenience to visitors and workers. The adjacent Government High School makes it the centre of boy and girl life and the educational centre of all the country for eight miles or more around. When we have several times been confronted with the possibility of having to move, we have realized the disadvantages of other places such as any one of our other outlying villages. When recently several commissions, studying us, have asked: 'If you were to start all over again, would you choose this place for a centre?' we have answered: 'Yes, exactly the same place,' with full positiveness.

We and the many honorary workers who would labour with us in the area round would apply ourselves to answering the greatest needs by methods suited to local conditions. We were not strangers here. For a long time there had been our village associations, and one of our rural secretaries had already spent seven years establishing and nourishing co-operative societies in this area and the whole of South Travancore. But when men came and said, 'we want this' and 'we need that', and 'we should do this' (often contradicting each other) we felt even more keenly the need of a survey which would show us actual conditions and facts, beyond all hearsay and guesswork. Many believe in careful surveys before setting up activities, but how comparatively few in India actually get these surveys done!

Survey to Learn Conditions

Experience had already brought us to believe wholeheartedly in intensive work rather than in spreading over a wide area. We decided to concentrate our main activities within a circle with a radius of five miles from the

Centre, though the influence of these activities would reach far beyond that circle. Our first survey was restricted to about a three-mile radius from the Centre. In it, as shown by the accompanying map, we have the greater parts of five *pakuthies* (groups of villages) and here we found the surprising number of forty-six villages. The land here between the mountains and the sea is hilly and less fertile, with a smaller acreage of wet lands. The river Tamravarni flows through these *pakuthies* in a westerly direction. It is not a navigable river and is almost dry in the hot season of February to May. Except for some gardens close to its banks it does not help towards irrigation of this area, in which dryness contributes much to poverty. The rainfall is only 40 inches, mostly during the periods of two monsoons, so is not well distributed.

Joining Hands With Whom? A central principle of our work was that it should be fully co-operative, for and by all classes of the people. Who were our people? We found that there were just over thirty thousand Hindus, a little less than a third as many Christians, six hundred Mohammedans and one thousand others. To bring all these to co-operate in a programme of rural improvement would not be easy: the Roman Catholic and the London Mission Christians had a minimum of dealings with each other; the Mohammedans and Hindus were not over friendly; the Hindus themselves were divided into eleven main castes of which the Nadars comprised sixty-nine per cent, the Nayars eighteen, the Ezhavas three and three-eighths, the Cherumas, Vellalas and Parayas each one and a quarter per cent.[1]

This mixed population of 44,829 religiously inclined people had for their worship thirteen Hindu temples, eighteen Catholic and London Mission churches, and three Mohammedan mosques. The little combined church and school buildings of the London Mission were to be of the greatest service to us, for ours is largely a non-equipment

[1] Other castes, such as Ambattans, Brahmans, Pulayas, Thatans and Parayans, had less than one per cent each.

work and these buildings have been freely placed at our disposal for meetings when it is not convenient to hold them in the open.

Was Education Sufficient? The extent of literacy and the progress of learning would affect our work materially. Here we were in a State which leads other parts of India in literacy, and especially in the education of women. Yet investigation showed that even here only one person out of seven could read or write. The Government, the London Mission, the Roman Catholics, the Salvation Army and private managers were working at education to the extent of thirty-six schools with 5,282 pupils and 186 teachers. Among the 560 pupils of the English High School adjacent to our Centre we were to find youthful but efficient colleagues for much of our work, and teachers of all the kinds of schools are among our foremost honorary workers and demonstrators.

But 37,000 unlearned in this three-mile radius area showed us at once that our activities must be educational, and that there must be night schools both for the adults, who never had a chance when young, and also for boys and girls who could not attend the day school, being too poor to pay the fees, or having to work during the day. Another fact soon revealed what a study of schools generally in India will reveal, that what was being taught in the schools was not well-related to the life of the pupils and that it would not have sufficient practical value to the learners. It was not rural education.

Need of Social Centres. One of the most valuable possibilities of our programme would be a common meeting and working ground for all castes and creeds, and we looked for any semblance of an existing organized social centre. There was no social centre but plenty of facilities for getting drunk. There were eight toddy and four arrack shops for this small area, and the frequency with which the people resorted to them for drinking was shown by the fact that in 1924-5 Government received in licenses for toddy drinking Rs 6,565 and for arrack Rs 9,370. The

drink-shop-keepers were doing a thriving business. They had to in order to pay these amounts for licenses.[1] Educational temperance teaching must become one of our activities. That they may be insured big trade from many people coming to them, several of these toddy and arrack shops are ingeniously situated close to the market places, where it is convenient for the poor villagers to spend before going home the few annas they have received for a small bit of produce.

The Market Places. Still nearer to social centres are those primitive institutions, most picturesque and interesting from both a sociological and economic point of view—the market places. As many as five thousand people come to a rural market place on market days, each person to barter or sell what he has for what he wants more. This trading day constitutes a large share of the social life of the villager. Here along with his bartering he meets practically every one of his near and far neighbours, and there is always much talking and visiting. The regular weekly gathering for the market gives us one of our most important opportunities to interest many people who never went to any school and who in the normal course of things would never come to our Centre. After meeting them here, they may come to our Centre and we may go to their homes. At nightfall the bustling, noisy, market place quiets down into just a barren country field, so to remain till next market day.

Our survey showed us that there were eleven regular markets available for us, so placed that nearly every person in the area could be reached through them. The Kalikavilla market comes into being Mondays and Thursdays, the one at Thoduvetti Tuesdays and Fridays,

[1] Toddy is made from the juice of palmyra or coconut trees. Climbers obtain the juice by cutting off a flower stem and hanging a pot on the stub. One climber climbs to the high top of 40 trees twice a day—a hard day's work for 6 to 8 annas (6*d.* to 8*d.*). Arrack of a very high alcoholic content is distilled from toddy—a Government monopoly. Tree owners are taxed for the privilege of tapping for drink—for a palmyra tree Rs 3, and for a coconut tree Rs 6, per year.

with a special market for cattle on Tuesdays; and there are eight small markets, meeting every evening.

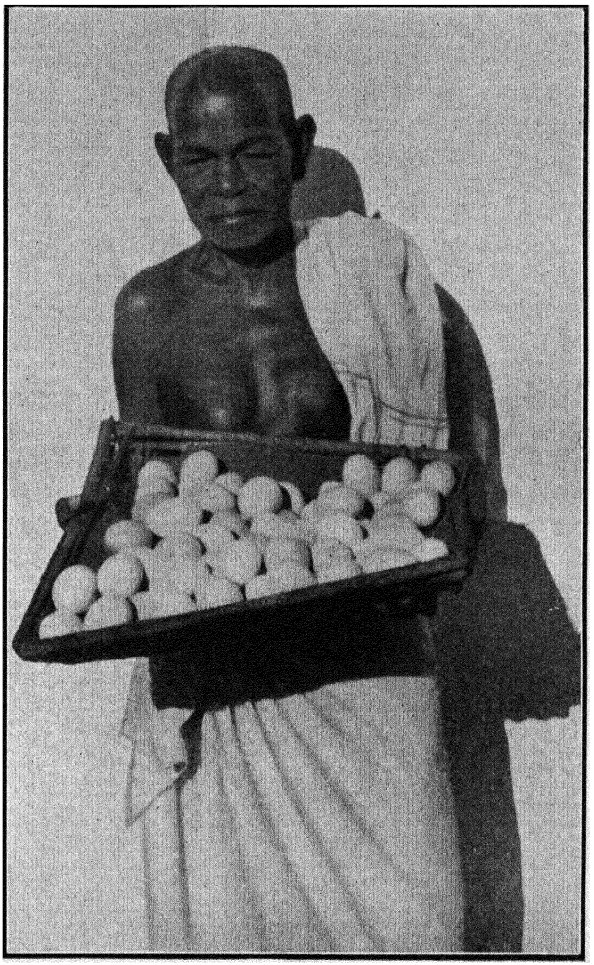
Cottage Vocations. We would try to improve the quality and consequently the prices of the products of the cottage vocations of the area. Jaggery (sugar) making is the chief cottage vocation of the place. The juice brought in by the climbers from the palmyra trees (when not used for intoxicating drink) is boiled down into sugar by the women in their little homes.

There were about 100 families, mostly of the weaver caste, engaged in hand-weaving. They generally used uneconomic looms and we were soon to set up a weaving school which would illustrate better methods and would teach poor boys to weave first-class cloth at greater speed.

In the five *pakuthies* we found an average of six families engaged in each of the following other cottage vocations: smithery, the making of baskets and mats, *beedies* (native cigarettes), fibre, pottery, brass-ware. None of these products was of superior quality, and we set ourselves to the task of creating a consciousness among the people to improve the quality, to teach the methods, and then to help to a lucrative co-operative market with better prices for the improved products.

The Daily Wage. We found whole families existing on less than five annas (five pence, 'a dime') a day. When money payments were made, the weaver received six to ten annas, the palmyra climber six to eight, the basket-making women two or three, carpenters (very scarce) eight to sixteen, *beedi* boys two, smiths eight, and day-labourers six to seven, annas. These are hardly living wages, and they are made less sufficient by seasonal idleness for several months in the year.

Common interest charges ranged between 19 and 40 per cent but sometimes the rate went to 300 per cent. One of my Indian colleagues had already given several years' attention to the need of credit for productive purposes at reasonable rates of interest in the wider area of South Travancore. Three of the four Co-operative Credit



COMING INTO NEW-FOUND WEALTH

Outcast still, but he has learned to turn out the finest products, which he brings in to his co-operative market

societies then in the Martandam area had been organized by him. The other one had been organized by Government for the benefit of Government servants.

Obviously a main reason for greater poverty here was that a large portion of the land was high, dry, rocky and poor. Measurements showed that the proportion of low paddy (or wet) lands was only 19 per cent—2,229 acres against 11,207 acres of dry land.

Tapioca on the dry land and paddy on the wet were both yielding only about tenfold. There were no irrigation works; paddy was watered by rain-fed tanks and the rainfall was only about 40 inches. The people took practically no interest in improved seeds and purchased no seed from outside.

The Cow Tragedy. The Indian cow generally is a tragedy. Here she is almost more pitiful than usual and we soon were overwhelmed with expressions of the need for taking up improvement of cattle as a major project. Of the 1,985 cows in this small area we could find hardly one that looked as though she were capable of giving milk. The average amount given by a milking cow was found to be less than two pounds a day for a short lactation period. There were five so-called seed bulls in the area, i.e. bulls from which the owners received a small fee for their services, but not one of these was of improved breed.

There was a great deal of carting and ploughing going on as evidenced by 203 carts and 2,098 ploughs, but the 3,762 work-cattle were badly in need of improvement. The area depended upon these oxen and some help from 738 he-buffaloes and 87 she-buffaloes for all its draft work. There were only 3 horses. Other livestock found in the area were 839 calves (many of them half-starved), 4,438 goats (for meat: a very small, poor variety), 13 asses. There were no sheep and the term 'mutton' here meant goat meat and nothing else. The average price of a cow was Rs 40, of a bull Rs 60. Lack of pasture was a most evident need. There was no common and little private

pasture. Here was a chief problem. Fodder crops must certainly be instituted.

Poultry. A few small country-hens and often almost as many cocks were found running around nearly every house. Our subsequent special poultry surveys indicated that these were kept at a loss. They were not cared for and laid but few very small eggs.

Bee-keeping. Six or seven miles away from the Centre the rural people tied old pots up in the trees and kept some bees in their primitive way, but in this three-mile-radius area of the first survey there was only one man keeping bees. Still, there were a fair number of wild bees, and our observation led us to believe that bee-keeping could and should be made a profitable cottage industry here.

These findings give some impression of the conditions and the people among whom our Rural Centre with its extension activities was planned. Wishing to understand conditions even better we made at that time a more intensive survey of a typical single village—Maruthankodu. The findings here collected in greater detail helped to confirm and clarify the indications of the general survey.

CHAPTER VII

THE RURAL DEMONSTRATION CENTRE

LOOKING round our Martandam Centre, you will not see any attempt at an impressive show place. The policy is the direct opposite of this. The extension programme in the area, establishing these helps and methods among the people, is the important thing. So the Centre is a simple experiment station, where we try out many things and methods, and an inexpensive illustration of some of the projects and activities. It is an organizing headquarters. It is as near self-supporting as possible, though no purely educational and experimental institution, even in the field of socio-economics, can be fully self-supporting and not sacrifice its aim. The aim of the Centre is education and not business.

The acre of land with the house is rented for Rs 20 a month. The house has served as a dwelling for the Indian secretary in charge of the Centre, and his wife. Some of the rooms and the verandas are used for meetings, for storage and for exhibition of teaching equipment, for receiving, testing, grading and packing products.

The palmyra, tamarind, coconut and other trees give shade to the poultry, bees and animals; they yield some income and serve also for experimentation in manuring and culture. Here and there over the grounds we see various experimental plots. In some of these there is guinea grass, napier grass and Soudan grass for cattle fodder. Lack of pasture for cattle is a serious, almost forbidding problem. We illustrate the growing of such

fodder plants as can be grown in comparatively small spaces and cut every ten or twenty days as feed to supplement insufficient pasture. We in India must realize that in excellent grass-country it requires an acre of the best or two acres of fairly good pasture to feed a cow in the five best grass months, and on the other hand that it is quite usual to grow fifteen tons of silage to the acre or enough to furnish the main roughage requirements of three cows for seven months. In other plots we illustrate better varieties of garden, field and fodder crops and grasses and methods of growing them, including fertilizer experiments. Cultivators are assisted in securing seeds. The plants illustrated include varieties for green manuring.

We have found that community interest is quickly aroused in superior varieties of vegetables grown here at the Centre. In response to such demonstration comes the demand for seeds and instruction in planting and growing the home-gardens. It is desired that each family shall raise a supply of vegetables and fruit which will through the different seasons furnish them with needed food in variety, and with some extra vegetables which they can trade in the markets for other necessaries.

The poultry yards, houses, and equipment are all very simple and inexpensive. There is no point whatever in showing the poor villager a model poultry house that costs Rs 75 to build. In his vernacular he will simply say: 'Very nice', and never once think of having one for himself. It would do him no good so to think. We have to build and show him a suitable house for thirty hens that can be built mostly out of the mud, coconut leaves and other materials of his own compound, with an outlay of not more than Rs 10 to 20. We have to show fully scientific, self-feeding, drinking fountains, made for almost nothing from old bottles and coconut shells, and other poultry yard equipment as simple as possible.

In the poultry yards and houses there are some of the White Leghorn fowls and the improved breeds of turkeys —Martandam Blacks, and Mammoth Bronz. The White

Leghorn has been the breed most introduced so far, it being well fitted to the climate and the best producer of eggs, which is the commodity most desired and most appropriate to the eating customs of the people. My analyses of Indian foods have shown how much the dietary needs those elements which eggs can supply.

We are pushing cross-breeding—White Leghorn cocks with country-hens—which brings a great improvement even in the first generation; and is easier for the poor villager than breeding pure ones. All surplus cocks are put out and moved from family to family on a two-months-shift circuit. The economy and far-reaching effects of this system can be imagined.

The slogan for this project 'twice as many eggs and twice as large ones' is rather an understatement than an exaggeration; and an atmosphere of flourishing success has pervaded the whole poultry movement here since the establishment of co-operative marketing of eggs. If you are at the Centre on either of the two market days of the week, Monday or Thursday, you will see all these village people coming in with their eggs, to be tested, graded, stamped and shipped as I describe in the chapter on how we use the co-operative method.

We have here some of the heavy milking strain of Surat goats which are recommended to the villagers under the sobriquet, 'the poor man's cow'. A good goat gives more milk than the average Indian cow, and can be fed at much less cost. The villagers bring their common goats for crossing with the Surti male.

The handsome Sindhi (Karachi) bull thinks he is lord of all he surveys. He and other individuals of his breed, which we consider best of the Indian breeds for milk, are kept here to further the cattle project of which I tell elsewhere.

A simple inexpensive bamboo shed houses our weaving school. We should like to see a loom in every rural home on which the bread-winner of the home and also the wife and larger children can make profitable their spare and

idle time. Here instruction is given to poor boys and others on the improved but inexpensive types of looms. These boys while in the school learn about all the other projects and methods we are furthering and so are better fitted to combine weaving and other cottage vocations with agriculture, to which they shall generally be subsidiary.

Hand in hand with weaving may go dyeing, that ancient indigenous cottage vocation. At our Ramanathapuram Centre the villagers are shown how to make fast-colour dyes out of barks, roots, seeds and leaves at minimum expense. Barks, roots, leaves and fruits of various trees and plants have been experimented upon in connexion with certain chemicals with the result that new processes have now been discovered for dyeing certain new shades of colours. Experiments and research continue to be carried on with the hope of adding to the vegetable dyes which have made Oriental rugs and fabrics world renowned and permanent.

Farm implements of improved varieties are kept on exhibition and their use is demonstrated. In this as in several other features of the work we have the helpful co-operation of the State Agriculture Department.

The very activities of our village work requires us to teach and to do some carpentry and basket making. We have to make the baskets and boxes and tins required for shipping the commodities of our co-operative marketing. The shipping of eggs, for instance, alone requires some 4,000 baskets a year and the making of these baskets is in itself a cottage industry. After instruction is given it is done in the village homes. We make, and teach how to make, beehives and accessories, poultry houses, and equipment for the various projects.

All about the Centre compound you see the bees in their improved hives. Up in a tree are bees kept in an old pot, the primitive way indigenous to this area, and here is a swarm in a natural 'bee tree'. Elsewhere I tell how in the extension work we teach the people the more productive methods. In the Centre building we are gradually

building up a permanent exhibit, illustrative of the products and activities of the work in the area, which is educative to students and especially to visitors who cannot spend much time out in the extension area.

Besides serving as headquarters for the extension work of its area, the Rural Centre, being in a village itself, serves to illustrate many of the activities of a model village association. This little Centre library, standing by the chicken yards and the play court, is one of the most useful buildings of South India. It was built by the night-school boys with their own hands at a cost of Rs 40. It is so inexpensive that almost any village can have one like it, and villages are copying it for even less cost. It is the centre of the circulating library system for the area. These two volley ball play courts are for games and physical education. Here are models of the bore-hole latrines which are a feature of our extension health service. Our Travancore Centre pioneered scouting and gives it encouragement. Our scouts are among our best helpers in community service of all kinds. Our Boys' work groups, and girls' groups use the Centre play field, have a small building of their own, and help in many of our activities.

The Demonstration Centre is truly a 'Community Centre', a convenient and popular place for special functions which are of general interest to the whole countryside. To these people come in great numbers, walking barefoot from villages far and near. Such occasions include lectures by prominent persons, exhibitions, dramas, sports meets, scout and health demonstrations, conferences and week-end study groups. The Martandam Practical Training School in Rural Reconstruction to which students come from various parts of India, Burma and Ceylon and some more distant countries, is held at the Centre and in the extension villages.

The Staff of the Centre as well as that of the Extension Department consists entirely of young Indian men and women with high school or more education who are active, able to move about quickly, well-trained and skilled in the

methods which they have to practise and teach, and willing to live in simple rural manner, not too expensive for the budget available. The Secretary who had been in charge of the Centre, who holds a Master of Arts degree, has been loaned to the Cochin Government to help that State to establish Rural Reconstruction. I am in general charge of the whole work, including extension projects over a distance of 200 miles, giving direction and help in all ways I can.

The Royal Commission on Agriculture, coming out strongly in its report for demonstration in the cultivators' own fields, declares against the opening of any more demonstration farms until this has been done.[1] Two facts, as far as any observation goes, worked against the success of the Government demonstration farms; they did not have adequate and appropriate enough extension facilities; and their official staff were not on intimate enough terms with the rural people. It is only a very personal, even brotherly, extension service that makes our Rural Demonstration Centre able to spread its teaching and the benefits thereof to large numbers.

How May All India Have Centres?

A main question put by various commissions who have studied us indicates to me that I should tell here something of the cost of the Centre and of its Extension activities. What is the cost of this work? The cost for 1938 to our National Council, under whose auspices the work is conducted, is Rs 1,184-15-0 for the year. The remainder of costs is made up of income from the Centre as well as income from the area, including local Government grants. It would be increased if the Centre found it necessary to recall or to employ a more expensive Secretary to be in charge. My own maintenance is paid from outside India for general services in Travancore and Cochin and for direction of Rural Reconstruction both within this district and beyond.

[1] *Final Report*, par. 131.

There is a small grant from Government to help each of the following: night schools, maintenance of service bull, weaving school, central library, and central exhibition. Since 1932 we have also had a block grant from Government. We try to make each feature of the work, such as weaving, cattle, poultry, bee-keeping, self-supporting as far as we can without sacrificing its educational aim, and being sure to keep its benefits within reach of the poorest people. The economic level of the area is extraordinarily low, but the people are given an opportunity to contribute to Centre funds.

Such centres for Rural Reconstruction work are being advocated for all parts of India, and the worry of the advocates and all missions or other organizations, even provincial and state Governments, which contemplate them is, 'How can we afford them?' India's larger interest asks dubiously how such centres can be spread all over India. This fear comes largely from over-emphasis of the importance of the Centre with often no mention at all of extension activities. Centres as close as possible, each with a five-mile-radius of working area, have been advocated.

I should like to point out as some comfort to those who worry, that it is not at all necessary to have such centres in every five-mile area. While we have a five to seven miles range for intensive work we continually receive evidence showing that the influence and inspiration of this work is felt for more than a hundred miles.[1] And anyone so interested, no matter what his distance, is welcome to come and study with us and learn how to put our methods into practice in his locality. Everyone who practises these methods well and profitably becomes a demonstrating centre to his neighbours.

Then when there is a main centre like ours, a small centre for a single village or a few villages can be started anywhere within a hundred miles with a young, trained

[1] See in later chapters the Story of Paranium, and the Story of Oollannore.

and energetic but very inexpensive worker in charge. His centre should be little more than headquarters and his work nearly all extension work among the people. He need do almost no experimental work. A worker, like one of our young assistants, can manage such a centre and do excellent extension work. The important thing is that he should be thoroughly trained through experience so that he can actually do all the things he teaches. There is so much disrespect for youth in India that people will not follow his personal teaching without some authoritative backing. He must have the larger centre and its staff behind him, and the people must feel that what he is teaching is not only his knowledge but that of the larger centre. On this basis I am enjoying seeing ignorant age sit respectfully at the feet of well-informed youth—to learn.

By this method Rural Reconstruction work can be done over a large area, inexpensively, with not more than one main centre for a radius of a hundred miles or more.

CHAPTER VIII

RURAL EXTENSION SERVICE

The Village Appropriates the College

When he is yet a great way off, the villagers see him and run out to meet him. This picture of one of my Indian colleagues approaching a village is both beautiful and full of hopeful significance. There is always a waiting list of invitations from many villages for our secretaries to come and give teaching and guidance towards more abundant life in the villages. And then, when trouble comes . . . As I write a tired but animated young man comes riding up on a bicycle. He has ridden all the way from the village of Paranium, seventeen miles away, to request the Centre secretaries to come and help about the terrible epidemic that has attacked the poultry of Paranium and is even causing the crows to drop dead in the roads.[1] When a palmyra climber loses his hold, falls from a high tree and is killed, his poor widow, whether she be Christian or Hindu, runs to the Centre for help.

This situation is the right one. The demand should come from the villages themselves. Agricultural extension should be like a suction pump rather than a force pump. Too often an agricultural college or department has something it wants to propagate and it goes about squirting it out to the people as with a force pump. The situation of felt-need should first either exist or be created so that there is, as it were, a real suction and demand from the

[1] A most virulent disease, which takes off whole flocks of beautiful laying hens in a few hours or days.

people for the help teaching agencies are prepared to give. We have after study embarked upon the giving of such help as the people really need, and this is the secret of the demands coming so strong from them. It is the secret of much hearty co-operation.

Taking the advantages of the practical knowledge resulting from college teaching and from research to the rural Indian villager, who may never have been in even a primary school, is our extension task and privilege.

Chief attention is given to extending to rural families those features of practice and living illustrated at the Rural Demonstration Centre, though it is not by any means confined to these. All the advantages of what scientific education we workers have, the literature of agricultural colleges and experiment stations in India and in foreign countries, the world of experience of many experienced and able men, are all, to a large extent, available for our use. It may be laid down as a principle that no foreign method can be taken to India and used with maximum success just as it was used in the foreign place; but all sound principles, truths and methods can be adapted to India's use, and in this adaptation or non-adaptation lies success or failure.

In general the extension service aims to foster and develop those lines of endeavour which make for better homes, better social and religious life, better health, better income and better rural living in every sense. An industry or method may or may not be self-supporting in our demonstration centres. That is not the important fact. *Are the villagers taking to it and with profit?* That is the whole test.

Village Associations

The strong and fortunate basis for our extension work is the village Young Men's Christian Associations. Through them as the chief units of our simple organization, of which we have explained the need in Chapter II, we work and teach. They are parent and nurturing

agents for the other forms such as the co-operative societies of all kinds, the clubs, and the Rural Development Association.

What are these associations? They are not artificial. The great and appealing needs of the village press in hourly upon the consciousness of all who live there. These associations are a banding together of young men of the community to do something to better conditions, to answer the needs, and make the village a better and happier place in which to live. They come of a desire to serve, and of a realization of the truth that a single village young man can be effective only when he bands himself with the strength of others.

The strength of these associations lies in their 'Who's who'; most of them are without buildings and equipment. Their committee-men and members are young men and boys *imbued with the spirit of service, above the mean of the village in education and enlightenment, trained in service* (by their service in the associations). Young school teachers, lawyers, farmers, high school boys and others are the leaders. They work in their spare time without material reward and one cannot but marvel at the devotion and amount of time and energy some of them put into this labour of love.

So we have in our Travancore and Cochin district these working groups in one hundred and thirty-one villages, ultra-rural and simple in their organization, their work adapted to the local needs. The work is not stereotyped and in no two villages will it be exactly alike. When a group of young men in each village ask themselves: 'What are the greatest needs of our village that no one else will meet?' the answer will not be quite the same in any two villages. Even though this be true, we find that in every place there are needs under the following five general classifications: Religious, Educational, Physical, Social and Economic.

The natural religious tendency which is in most Indians, it matters not of what caste or religion, should always be

made the foundation for all kinds of work towards better things. He serves best who keeps this religious tendency glowing brightly in his life. A truly deeply religious Hindu and a truly deeply religious Christian, we find, work better together because of the common bond of religion. A truly religious nature even in men of different religions is a help to joining hands and not the hindrance that many suppose. When our groups of village leaders ask themselves, as they often do: 'What is the one greatest need in our village?' the answer generally is: 'That our religious life be quickened, made vital to control and guide all we do, seven days in the week.' Then they conduct their religious department activities with that end in view.

This is largely non-equipment work. Only a few of the associations have buildings. They would like to have little buildings, could they afford it, to serve as headquarters for their work, house their little libraries and other simple working equipment, accommodate their smaller meetings. In the few places which have them, their little verandas serve as stage, platform, or pulpit for large audiences which sit on the ground in the open during good weather. The few which have been built by the members' own hands are veritable lighthouses, not only to the villages in which they stand but to the other villages around. In most villages the members hold their rainy-weather meetings in some little church or school building.

Each association has its honorary general secretary; and each of the departments, religious, educational, physical, social and economic, has its honorary departmental secretary. There is a general committee for the whole work, and smaller ones for each department. The religious work secretary in our organization will naturally be a Christian, but members of other religions may take leadership in the religious work, as when a Hindu leads a class in study of the Bhagavad Gita. In the other departments non-Christians often become committee members or even secretaries. Sometimes special committees are formed for specific projects, as for educational temperance work.

Hindus and Mohammedans sometimes take the greatest interest in this work and consequently take the leadership and secretaryship of it. In some associations there is a paying membership. In most, however, membership is free; and for necessary funds specific appeals are made as needs arise in the work.

A list of the great variety of services rendered by these voluntary workers would be too lengthy to print here. It would be difficult for an outsider to imagine what a prominent place the village association holds in the village and how devoted the members are to it. We are sometimes asked how we 'go about organizing new associations'. We do not try to have more of them. When a village has one, the next is not satisfied until it has one too. When an honorary secretary or member is transferred to another place, he is not satisfied until he has started an association there through which he and others can carry out their desire to serve. This is how the movement spreads. Where in any village there is a sufficient nucleus of such young men, the association will flourish—where there is not it is better not to try to have one.

I have already indicated that the village associations are our fortunate foundation for spreading any new method. If we come with a new and better breed of poultry, it is these honorary workers who can best demonstrate the advantages of these fowls by having some themselves and then teaching others how to have them and their profits. These workers have proved themselves and their example is trusted.

In their educational departments they think a great deal of their little libraries, kept sometimes in a borrowed or rented room. Only a very small percentage of the people can read but there is the very picturesque and truly co-operative custom of men sitting around and listening while one who can read reads aloud. And those who have had educational opportunities conduct night schools for adults who missed schooling when they were young and for boys

and girls who have to work during the day or are too poor to pay the school fees.

In the physical department there is so much to do in the way of physical and health education among people who look forward to the shortest life span of any people in the world, that it is given special emphasis in our schemes for training workers and in local programmes.

Socially these associations, constituted on a whole-community basis to be worked for and by men of all castes and religions and conditions, have a unique opportunity denied to any sectarian or denominational body. They can do good without being suspected of proselytizing motives. On this common platform all can meet, get to know and appreciate one another, work and serve, and enjoy it all together.

Likewise with efforts and methods toward economic improvement, these village associations are our basic machinery for spreading any new teaching or help so that many people may adopt it and enjoy its benefits.

A further illustration of the usefulness of village associations, and more particularly the committee system, was the relief given to the poorest classes of sufferers in Travancore during one of the most disastrous of India's floods in 1924. One-third of Travancore State was flooded. The Travancore Central Flood Relief Committee quickly set up an organization which worked through forty-seven sub-area local committees over the flooded parts. It raised Rs 73,307 and, besides immediate relief in food and clothing, helped toward rebuilding 29,000 huts and houses of the poor which had been washed away. The accomplishment of the Travancore Central Flood Relief Committee, though not a part of the brotherhood of affiliated village associations of which I have been writing, illustrates the efficacy of the same type of honorary, unpaid service. When the floods came so suddenly with their unprecedented devastation, I was asked to be secretary in charge of organizing relief, and I helped to set up quickly essentially the same committee system. Several of these associations carried



TEACHING IN THE MARKET PLACE

on relief as part of the work of the Central Flood Relief Committee. They responded again in the cholera epidemics of 1928 and 1937. If there is some such form of local association in a village, the village has then a body of sympathetic men trained in united service who can quickly and effectively take up relief work in case of floods, famine, pestilence, cyclones or any other emergency.

SOCIALIZATION

Socialization is one of the very uppermost aims of all this extension programme. By socialization I mean the bringing together of all persons in the area to work together and move together freely and happily—members of all castes and religions, the poor and the more well-to-do, the illiterate and the educated. The extremely slow degree of socialization in India has most tenaciously helped to hold this country in poverty, thereby justifying our making it a major object of study and effort. Failure in economy means failure in socialization.

Socialization and co-operation must go hand in hand, and I may preface here the chapter on 'How We Use the Co-operative Method' by saying that we are absolutely opposed in our rural work to communal societies of any kind. We will not be connected with a society of any particular religion or caste if it means that other castes and creeds are excluded. Often a group of persons come to us and say: 'There is a Co-operative Society in our village. Those of our caste and religion are not allowed to join.' If they be Christians they may say: 'We want to start a Christian Co-operative Society'. When asked if they like being excluded, they say: 'No'. Then they begin to see that it is not quite the thing to go and do likewise. No, they may start a co-operative society but it must be truly co-operative—wide open in membership to all persons of worthy character. We can approach and work with the various castes and creeds without being suspected as a denominational body may be—hence this bringing of union

becomes at once a greater responsibility upon us as well as a rare privilege.

The inter-caste co-operative society draws into its membership, out of their similar needs, former ultra-individualists. Such men find themselves associating in a very personal venture, not only with other men but with men of other castes and creeds. The member finds himself benefited by this kind of association. He experiences joint liability, but still for his benefit. There is clear evidence in our villages that such a man becomes willing and even keen to join in other inter-communal ventures for his personal and the general good.

The South Travancore Rural Development Association. To bring into one working group all interested persons who may or may not belong to any of our village associations or any of our co-operative societies of various kinds we have the South Travancore Rural Development Association. And, as is seen by the objects here given, its very first purpose is to speed up socialization throughout our whole extension field. The objects are :

1. To bring people of all castes and religions to join hands in this work of improving the economic, social, moral and spiritual welfare of the people living in the villages of the Martandam Extension Area.

2. To demonstrate and popularize in the villages better methods of agriculture, and cottage industries proved to be profitable by the Government, the YMCA Rural Demonstration Centre and other agencies.

3. To help rural families to increase their incomes by the application of co-operative principles and methods in the production and marketing of agricultural and industrial products.

4. To help towards better livestock, poultry and varieties of plants.

5. To improve the health of the people by introducing methods of sanitation, by sinking wells, teaching health and character-forming games and carrying on health education.

6. To help in the holding of exhibitions in the villages and at the Rural Demonstration Centre at Martandam which show results of our reconstruction work, and to stimulate others to have better products.

7. To check the evils resulting from the use of alcoholic drinks and drugs by educating the masses through lectures, exhibitions of charts and pictures, lantern lectures, distribution of literature, etc.

8. To improve road communication to villages.

9. To settle disputes by means of arbitration by panchayats.

10. To do any other thing possible to promote the well being of village people irrespective of caste or creed.

This association has a majority of non-Christian members; its first president is a Nayar-Hindu gentleman who is the headmaster of the large Government high school adjacent to our Centre, which school is the educational centre of the extension area and helps materially through its pupils in spreading what we teach. The other members of its committee are elected from different castes and religions; and its membership admits all persons, male or female, who will work for the objects of the associations and contribute towards them.

The Rural Reconstruction Unit in Action

All agencies in a given local area should mobilize all their powers and all their interests for the common good of the whole group. To this end it has been recommended that 'Rural Reconstruction Units' be started. Our method was rather to start serving, and then gradually and naturally to enlist the co-operation of all agencies until we had the full Rural Reconstruction Unit in action. I do not know that this could be successfully done artificially or from a 'set-up' at the start. The success of the work owes everything to the hearty co-operation and participation of all agencies, which include the London Mission (missionaries, pastors, and catechists of the churches, the home

mission workers—who when we came with this new type of work into their old field welcomed us saying: 'This was needed to complete the Christian programme. When we had taught the people the better way of life—the Christian way—many of them were actually too poor to live it'); the village YMCAs (which are autonomous); the Salvation Army; the school authorities (as I have described)—the Director of Public Instruction, the headmaster of the Central High School; and the teachers of the village schools; members of the staffs of the State Colleges; the officials of the Government Co-operative Department; the Agricultural Department and the Department of Industries; the Commercial Chemist, the Dewan Peishkar (chief revenue officer); the Tahsildars; the village officers; the doctors of the Medical Mission (which has a small hospital across the road from our Centre) and the Government doctors; the Department of Public Health; the Boy Scouts and Girl Guides authorities; and above all the people—the people of all castes and creeds and conditions.

Along Extension Pathways

Come with us on an 'extension' trip among the villages. Part of the way we may have to walk as we may visit some of the roadless villages. We shall meet the honorary workers who staff some of our rural associations which, as I have said, are foundations for spreading new knowledge, methods and vocations among the rural families.

In some village we may find them conducting an Educational Week. These weeks are accompanied in each place with an exhibition of educational material. Outside speakers and demonstrators are brought in. Such functions are very popular and are attended by large numbers from the near and far country-side. The rural secretary will be giving attention to the co-operative societies, especially the younger ones. He assists them in starting, and nurses them along until they are self-able. We may

step in at a meeting of a co-operative society and hear members tell of the loans they have taken and what they have accomplished with them.

We shall stop at one of the rural market places. Here will be as many as five thousand really rural people, most of whom never attended any school, demonstration centre or any directed education whatsoever. We shall see how at a stand or tent in the centre or just at the side of the market place our secretaries are exhibiting and explaining the demonstration materials, implements, live-stock and poultry. On the trees and under their friendly shade, are hung the illustrative charts. All day long people come to look at the exhibits and to ask questions of the rural secretary who is happy at the opportunity to explain. Since most of the enquirers reside in the local area there is opportunity of inviting them to the Centre and in further following up the contacts and helping them later at their own houses.

The Circulating Library. On the occasion of one extension trip like this, a hand-made village cart, two lean bulls, an almost naked bull-driver, and a young man waited at the corner where the village road joins the main one. They had come six miles from the village to meet Mrs Hatch and me who after a while got down from a bus. We climbed in and sat on the board-floor of the springless cart. The driver prodding the bulls and twisting their tails to breaking point accomplished from them a slow walk over an impossible road which was so bad because 'Government high officials never came that way'. It was near midday and very hot. There was no room to sit up straight in the cart. Sometimes we got out and walked.

The young man who had come to conduct us to the village association was the honorary 'Library Secretary'. To make conversation as we slowly proceeded, he said: 'Mr E. . . . gave us a book. It is a very interesting and helpful book; it has meant a lot to our village and is being passed about from person to person.' I happened to ask him: 'When did Mr E. . . . give you the book?' 'Oh,

we have had it over three years now,' was the reply. One book—still something to talk about—after three years! What does one copy of one book mean to the whole population of a western town?

I tell this incident as an index to what even little things, done by voluntary workers in their spare time or by others in answer to the great needs of backward, poverty-stricken Indian villages, mean to their people. There is an appreciation here, rare and sincere and gladdening to the heart.

As we continue along Extension pathways we shall see in the villages which subscribe to the circulating library (the headquarters of which we have seen at the Centre) the tin boxes for holding the books; and the villagers will tell of the paucity of literature and how much these books mean to them. There is now a children's section in the circulating library with not only children's books but also games. There are practically no toys in the villages, but the little child dragging a broken coconut in the gutter by a leaf-fibre he had tied to it, pitifully indicated that he has the same longing for toys and games as those fortunate children who have so many. Now the villages can take out games for the children, changing them every month, like the books, for new ones.

The secretaries will be giving direction to poultry-clubs, co-operative bee-keepers' associations, cashew-nut and jaggery societies, cattle and seed-bull associations and the like. Some of the boys' club projects will be found most interesting, and the young extension assistant who has had careful training in boys' work has special responsibility for listing and looking after every boy who is practising any of the projects we teach.

We must include one depressed class dwelling section in our Extension trip. Let it be a Sambavar village. Picturesque black rocks push their rounded heads up out of the paddy-fields owned by Nairs and Brahmins. On these worthless rocks live the Sambavar outcastes who do the work for the Nairs and Brahmins in the paddy-fields but whose station in life does not grant them a foot of land

on which to live. In their spare time these Sambavar men and women collect smooth wild reeds (*kora*) from the marshes. These when woven together with the thread made from the aloe plant make serviceable mats commonly used in India. The aloe-fibre is collected from the by-ways and hedges. Thus all the materials needed for making the mats are at hand. But alas, they do not know how. They sell these materials for a petty price to Mohammedan merchants who themselves make up the mats and sell them. The Sambavars tell us that they will gladly make the mats and we are attempting to put facilities for learning within their reach. If they learn to dye the reeds various colours, higher-priced mats can be made. Then they will need help in co-operative marketing of the mats. We see that these outcastes are availing themselves of the benefits of some of the other cottage vocations.

All along the way we shall be asked many questions by those who have taken up the various vocations, practices and methods we are propagating. The most effective instruction can be given when actual problems arise in working at the projects.

We shall inquire about any surveys that are going on. The Indian village still stands, almost untouched, as the most fertile, intriguing and needy field for surveys and studies. Village and area surveys, general and specific, and especially studies of limited phases of village life which present problems, are greatly needed. Our policy is to make a general survey ahead of the introduction of a programme in any place, and a specific survey for each new vocation, or established vocation to be improved. With a limited staff and limited means this is difficult. But, increasingly, honorary workers join in to help in these studies when we have laid out for each a specific outline and plan. The students in our Practical Training School in Rural Reconstruction go out into the villages to make surveys as among their first lessons.

We see along the way some of the health education work. Rural ill-health is appalling. How many of our finest

village leaders—strong athletic young men—have been stricken and died; and whole groups of villages have been affected by their passing! Who would have dreamed that there could be so much typhoid fever in purely rural places? Cholera took over 9,000 of our people here in South Travancore in 1928 and raged again in 1937. Hook-worm surveys by the Rockefeller Foundation indicate that in some of our villages every person has hook-worm. Hook-worm is largely spread through walking barefoot in human excreta and other filth. At our Centre and in our extension work we ever do what we can towards sanitation and health. The encouraging response we get is illustrated in the case of the bore-hole latrine the use of which we have pioneered.

This is a latrine which combines utility with sanitation and disease prevention. We loan the borer. The only cost to the villager, who can bore the hole and build a wall around it himself, is for the locally-made granite slab which we have invented for the top. It costs only one rupee. The concrete ones used in Madras would never be adopted by our poor rural families for it would take more keenness about latrines than can be expected to make them spend nearly half a month's salary on a squatting slab when that salary is already insufficient to allay the hunger of the family for food. We were forced to invent a cheaper one and out of the local stone it is hewn for one rupee. The nightsoil deposited in these latrines instead of all about where it spreads hook-worm and other diseases can be taken out later, an odourless, germless, excellent manure, made so by time and the action of soil bacteria. Even before we had experimented with this borer as much as we wished, village after village wanted it. They wanted it to bore near schools which had up to 300 boys and girls and teachers and no sanitary arrangements whatever. They wanted to bore in their home compounds.[1]

[1] In these parts we often strike rock and have to try in another place. We find that in the rainy seasons or by pouring water into the holes as we bore in dry seasons, we can put down excellent permanent holes through solid laterite.

After nightfall we may attend a rural drama. The direction of this powerful, innate and indigenous vehicle for Indian rural education, for cheering entertainment and recreation, for socialization and self-expression, is another responsibility of the rural extension secretary. The powerful Indian moon makes it easy for large crowds to walk in barefoot from distant places; and after the show it will light them home and us back to the Centre for the night.

CHAPTER IX

HOW WE TEACH RURAL VOCATIONS

FEW seem to realize fully how much a matter of education rural uplift in India must be. Education has shunned it. Many seem not to realize that the work described in the preceding chapters is essentially educational. This lack of realization is responsible for programmes for rural improvement based on other than sound educational practice and consequently weak in fitting for full self-ability to do and perform.

Securing and Holding Interest. The best teaching principles demand that we appeal to the individual in terms of his native tendencies so as to release his energy to learning. This holds interest. If the instructor cannot release this energy he cannot teach.

Why does educational philanthropy in the way of self-help methods for economic improvement get a better response than most other forms of teaching? It is because poverty and hunger give a very definite felt want. A felt want—a keen feeling of need—is the best basis for securing and holding interest. We have this actively present in the poor and hungry. One of the very first things to do is to show the learners that by keeping bees (or whatever the economic project is) by the methods taught for adoption there will result more income with which to purchase the necessities of life. The Indian peasant, though an outcaste and illiterate, readily responds to advice when he thinks it for his benefit. The money-lender and others take advantage of this virtue—that he

believes and responds and can therefore be exploited more easily. Over and above this natural responsiveness, there is the fact of his terrible suffering. One need only refer to his debts, his crops, the vagaries of the monsoon, his nerveless cattle, his poverty in general, to secure his immediate and unlimited interest. It has been truly said that the way to the Indian ryot's mind is through his stomach.

Reasoning. It will probably be thought that the ignorant, unschooled, adult Indian villager hardly belongs to the ranks of rational reasoners, to whom the philosopher John Dewey gives counsel.[1] But in comparison with the rank and file of hurrying Westerners, the Indian rural villager is a deliberately thoughtful man.

Selection of subject matter for teaching him has to be done so expertly that it has in it all that is necessary to answer logically and convincingly his questionings, all of which are influenced by his natural conservative disinclination toward things new. Show him the new hen's egg twice as large, and he still asks: 'But may not the quality be twice as poor?' The rural villager has not yet, however, that emotional set against things foreign that is so pronounced now in the politically-tempered minds of a large percentage of sophisticated town and city Indians.

The villager in effect, though of course not consciously, demands that our instruction allow him to go through the five distinct steps of reflection: (1) a felt difficulty, (2) its location and definition, (3) suggestion and possible solution, (4) development by reasoning of the bearings of the suggestion, (5) further observation and experiment leading to its acceptance or rejection, that is, the conclusion of belief or disbelief.[2] The first step suggests the very great importance of doing the teaching carefully enough, and then the further importance of following up—staying with the learner in his actual working-out of the vocation taught in order that he may not have 'bad luck'; or, if he does, that he may receive further encouragement at that

[1] See *How We Think*, pp. 68-78.
[2] Ibid., p. 59.

time. Bad luck or failure is very apt to bring 'rejection and 'disbelief'. And this last state of the man is worse than the first, in that he now has an emotional set against the proposal, based upon experience.

Instincts. The idea that 'education must address itself to the instincts, for they are the springs of conduct' is still held by many; though the very latest developments in psychology tend to deny that the instincts are useful as an explanation of conduct. We are now looking more to nurture than to nature for the explanation of conduct, with close study of the emotions. Closely related to instinct in the Indian villager is the tendency to hold to social and religious customs. This comes largely from nurture—environment. Education must take note of this also.

We have the complication in this work of having to deal both with the young and with adults. However, while interest, ambitions and ideals take on new forms, the great fundamental principles of learning are the same for the child, the youth and the adult. With all ages it is important to appeal to the natural interests of the learners. Dry-as-dust methods have no place in any teaching, and the Indian villager, especially the adult, may go to sleep on them sooner than the average.

The gregarious tendency is deep-seated in the human race, and best preserved in rural peoples of less sophisticated culture. This 'feeling of kind' is a part of the social tendency so strong in our Indian village. Indeed, it is one of the major causes for the very existence of the village. While individual instruction is also given, it is better to make the whole unit of instruction social. This is one of the reasons for the Bee-keepers' Co-operative Society which is formed to include those in the immediate locality studying improved bee-keeping. Much added interest, and even stimulating competition, is engendered through this socializing of the educational movement. The vocational interest is always present. Advantage should be taken of it. The matter of instinct and interest has intimately to do

with the all-important necessity of relating the teaching to the local life the pupil knows.

That note needs to be taken of the deep social and religious ideas and ideals of the locality is illustrated by the case of an excellent student who studied bee-keeping in one of our summer schools. He became greatly interested and bought improved equipment for starting in the vocation. But, on going home and meditating, his early training in the Indian religious philosophy of the close brotherhood of animals and insects to man came into consideration. He wrote me that upon reflection he had come to think it wrong to disturb the bees from their natural way of living, to manipulate them for man's selfish ends, and to take their honey which they had made for their own use. I had to show him that scientific bee-culture is a help and kindness to the bees, giving them a better-than-nature dwelling place; watching over and protecting them from pests which often exterminate whole colonies; and so aiding them in their greatest delight and interest—the producing of honey—that, after the bee-keeper has removed the surplus of production, the bees will still have more honey left for their own enjoyment and eating than by the way of undisturbed and precarious nature.

Plasticity and Adult Education. 'You cannot teach old dogs new tricks' is not necessarily true. The claim that adults cannot learn as readily as youths has been overemphasized. My experience has shown me that the older person may learn much better. It is very possible that he may see greater reasons for learning. If this creates in him a strong desire to learn he may learn with great readiness. It is true that with age comes greater fixity and less plasticity. And we desire a certain amount of fixity fairly early in life in order that the individual may have stability, and a set of fixed principles, thoroughly tested and believed, to guide him. On the other hand we never want him to become so fixed that he cannot accommodate himself to new light and new ways, to adjust himself better to the situations, also changing, amid which he lives. Given

this measure of plasticity and a desire to learn, the adult will learn well in comparison with the young.[1] Interest is the very important element. The old, interested, will learn better than the young with no basis for interest.

This matter is very important to us in India where there are such numbers of adults who missed schooling in youth. It is important since the prevailing idea that adults cannot learn prevents many from trying. It is important because of the governmental attitude that adult-education must be left largely to non-official bodies. The Royal Commission has declared: 'The advancement of adult-education is a matter for non-official activity rather than for Government departments, but the latter should assist it in all possible ways.'[2]

Experience of the individual ought to contribute to his understanding, and so to his ability to learn. It is interesting to note, however, that there are cases where the learner knows so much that it hinders rather than helps him to learn. I have recently witnessed the interesting case of teachers of psychology taking a summer course in psychology. These pupils who have taught this subject for years are having great difficulty, and are even

[1] I have been greatly encouraged by Thorndike's book *Adult Learning*. He shows that ability to learn increases gradually through early childhood and early teens until it probably reaches its fastest development during the middle teens; it still increases almost surely through eighteen and nineteen on to sometime between then and twenty-five. It then drops about one per cent a year. At forty-two, one is better able to learn than at fifteen and much better than at ten. Nobody under forty-five should restrain himself through fear of not being able to learn anything that his work in the world demands. Thorndike gives arguments for a person's education being distributed from the years 6 to 35 rather than its all being given between the age of 6 and 16. Three-fourths of 10,000 hours of schooling might be given between 6 and 16 and the other one-fourth be distributed in the years until he is 35 at the rate of 100 to 200 hours per year. Our summer schools, night schools and other classes are a step in this direction, as are the folk schools in Denmark and the winter short courses in American Agricultural colleges. Rural children may become illiterate again after they leave school and literate contacts cease. The college graduate in Travancore and Cochin sometimes hardly opens a book after he has left college, and his education rapidly evaporates.

[2] *Final Report*, par. 449.

failing in examinations—having more trouble than fellow-students new to the subject—because they depend upon what they know and are thinking about that when the professor is presenting the subject in a new way. They are not learning. When it comes to examinations, all they possess is their former ideas; the new ones presented in the class have entirely escaped them. Likewise, in the villages we sometimes have a pupil who has some knowledge of the subject being taught; and this may prevent his learning the new method as readily as a pupil new to the subject. This is a possibility, but is not true with a more intelligent student who will apply himself to what is being taught.

The Discussion Method, though not popular, is most useful in our rural teaching in India. Discussion is the logical means of making clear the lesson in hand. Carefully-selected experience of pupils may become the logical basis for the introduction of the new problem. It is the method of directing development. Through it we find out what successful and what unsuccessful practices have been experienced, and from this we proceed to new ideas and methods.

Discussion is an improvement upon the recitation method as it relates the problems more closely to the learners' lives and experience. It is valuable in pointing to applications. The suggestions which arise in discussions should be used in practical application. Our bee-keepers discuss with us how they now manipulate their bees, and we together work out how we could do it better.

This discussion method is most easily correlated with other methods. It can be used in the same class-period as other methods. It utilizes the activities of the pupils. The give-and-take of life and experience is interesting, and this method tends to make pupils self-active. A part of the period in the recitation, the demonstration, the field-trip, the laboratory or practice period may well be devoted to discussion, and discussion can well follow supervised study. Our people like lectures too well. At first they may not

see the greater good that comes from stirring themselves in mind and voice and taking part in discussion; but there is no doubt that lectures should be discouraged in favour of more discussion sessions, each under a prepared and competent leader.

To organize and prepare for the discussion is all-important. The dangers of the discussion method so easy to fall into, in fact, sure to be present if not guarded against, are digression, guessing, irrelevancy, and hodge-podge. The outline should be carefully made in advance. It will serve to prevent digression and will show the way back if it should occur.

When one is sure of one's methods, there is no more satisfying occupation than teaching out in the fields amid the quiet scenes of rural India—teaching rural vocations which shall occupy waste time and help to bring enough to eat to the learners and their families.

CHAPTER X

HOW WE USE THE CO-OPERATIVE METHOD

HAND-IN-HAND UPWARD

EGG-MARKETING day at the Centre is a great day. An inspiring day! Old men, young men, old women, young women, boys and girls come in with eggs. Some come by bullock cart, some by bus, but most of them walk barefoot. Some come from villages as far as fourteen miles distant. Some bring a single egg, or two or three tied in a handkerchief. Some bring as many as forty. They will come again like this in three or four days, for eggs are shipped twice in each week.

Then the egg gauntlet. The hopeful, eager producer watches his eggs go first to the weighing scales. If any are no larger than the ordinary country eggs they are rejected and must be sold in the local market. Those which are as large as the largest now produced in the area since the improved breeds were introduced are marked with a rubber stamp 'A'; those almost as large and larger than the common eggs are marked 'B'. The price is about twice that for eggs in the local market. By either the water or light tests or both they must be found perfectly fresh without the least shadow of doubt. If found absolutely fresh they are accepted; and the owner has recorded, on his page in the egg book, credit for his number of 'A' and his number of 'B' sized eggs supplied. In this book every supplier of eggs is known by a number, and his number is also stamped on every egg accepted from him. If ever a customer should later find an egg not

perfectly fresh after this severe gauntlet, it can be traced back to the supplier.

The villagers are paid at once for the eggs accepted. The price is about twice that for eggs in the local market, where price is based on small, untested and unsafe eggs. This is a fully co-operative business—for, by, and of, these poultry-keepers—so they stay and help. They help with the grading. They help with the stamping. They help wrap the eggs—each egg in attractive tissue. They help with getting the shipping baskets and boxes made ready. They help with the packing, closing and labelling of the parcels. Then perhaps one of them goes with the eggs on the bus twenty-five miles to the railway station to book and see them safely on the train. Even marketing is made a part of education—the aim being that the people themselves shall know how to do all this.

The eggs go mostly to private customers who appreciate freshness, dependability and quality and are willing to pay for them. Then the returns come in, and the producers find that after paying all expenses they can still have a reasonable surplus and each a small percentage bonus based on the number of eggs he has sold—this on top of having already received about twice the price of ordinary eggs.

Our customers have the eggs on a three-day guarantee. If ever they find a bad egg within three days of receipt they note and report the number which has been stamped on the egg, and it is replaced free in the next shipment. The producer can then be dealt with; and under this system the customer has absolutely no chance of loss from our eggs. As far as we know this was the first guaranteed-egg system in the Orient. We have many testimonials from customers telling what it means to dare to face boiled eggs again and know they will open up fresh and sweet. We know the joy of this for we use no other kind in our own home either for cooking or for table, and should dread to go back to the ordinary market-eggs which have taken their time through the slow, torrid Indian market route

where there is no test and nothing to induce the many middlemen to hurry them on to the consumer or to protect them along the way.

The above picture does not show how much help there had to be from our Centre staff. The demonstration Centre had to make the central egg business its own. The co-operative principle obtained throughout, in that the Centre helped to build up, in the various villages of the extension area, co-operative societies and clubs, and enabled them to market through the Centre as much of their produce as was to the advantage of these village organizations or individuals. We of the Centre staff had to get and maintain these select customers in various parts of South India, and to fill the orders from whichever villages, societies, clubs or individuals as was best for the benefit of all the people. We had to make the whole central demonstration as ideal as possible, employing that vision and interest in all the people of the whole area which local societies could not be expected to have. We had to use all our business training and ingenuity, all the results of our study and experience in marketing rural produce in other countries, had to help in advertising and in setting up a workable system, and we had to be relentless in emphasizing quality of product and care and constancy in every detail of the business. In one of our earliest attempts at co-operative marketing of eggs, the lure of a higher price was so irresistible that I fear some bad eggs got through. That was before we perfected our 'gauntlet', and before perhaps even our own workers fully realized that the whole business depended upon quality.

On December 1, 1935 the business was entirely handed over to the Society. They moved to a new building and with their Own Business Manager they have kept up the quality and increased the business.

Eggs are so valuable now that the villagers in this area will not sell their hens, either pure breds or grades. Before we got this marketing going there was much discouragement and doubt about the whole poultry business.

For five years we had been encouraging the people to raise better poultry, putting improved breeds within their reach, teaching them how to take care of them, helping them over their bad luck and difficulties—and now, when the area could produce up to two thousand superior-sized eggs every week, the egg-middleman in the market-place stubbornly said: 'An egg is an egg', and he was never known to give any more for a fine big double or more than double-sized egg. Now there is the greatest interest in poultry. Poultry-keeping is growing and is only held back by the serious poultry epidemic of the past years. Eggs are kept back on market days for setting to increase the size of flocks, and the neighbours of poultry-keepers come to them for eggs for hatching.

The co-operative marketing of eggs has been described somewhat in detail as an example of how we are making an effort to improve the quality of every important local product—one by one—and then to help market it. We manifest no interest at all in the ordinary product except to improve it, and this attitude is in itself a great stimulus to improvement. One of the first steps in connexion with any product is to form those engaged in producing it into a simple co-operative society. So at present we have our separate societies for producers of poultry and eggs, cashew nuts, honey, palmyra-sugar, cattle, and goats. These societies are at first exceedingly simple. They may be without rules or shares or admission fees. They need involve hardly more than the individual members agreeing to join for their mutual benefit and having their names on the membership list. Then they feel they 'belong'. With even this simplest form of organization, the teaching process can much better proceed. Later on, credit can be introduced to assist members in getting needed equipment, and co-operative marketing becomes a feature. When the society is sufficiently developed it may be advantageous for it to be registered with the State co-operative movement.

Cashew Nuts. We and our villagers have set up a system for marketing, all over India, the finest selected

cashew nuts. It is rather remarkable that even on the poor land here there grow the finest cashew nuts we have ever seen. We found that our friends even as near as the city of Madras were having to buy dirty, wormy, broken, stale, and burned cashew nuts. What would they be as far away as Calcutta, Lahore, the Army cantonments in the Khaiber Pass, and in Rangoon to which our nuts now go quickly by mail ?

We learned how to fry the nuts without burning the ends, and are teaching village families how to do it. It is the same picturesque indigenous home process of frying them in the oil of their own shells—simply improved and perfected. The heating of the nuts in the shells makes it possible to take out the nuts whole. This work, being hard work and staining the fingers, has become an outcaste industry ; so this project helps some of the poorest people the world knows. Seventy-five per cent of those who bring nuts are old women.

Rural people bring the nuts into the Centre. The nuts like the eggs run a gauntlet and only whole, first quality ones are accepted. Before they understood, the women especially got very angry at our sorting and rejecting a part of the nuts each brought. Below I give extracts from the attractive coloured folder we send out advertising Martandam Brand Cashew Nuts and telling our customers how to prepare them for serving :

In helping the Rural people of the Martandam Demonstration Area to market their cashew nuts in a way which will best please consumers, emphasis is put on quality. All nuts not up to highest quality an rejected.

A SUPER-RICH FOOD. The following chemical analysis of the CASHEW NUT shows it to be one of the most nourishing of foods. It also shows that this Nut has, in large proportions, just those constituents which so many foods in India lack. Serve CASHEW NUTS to balance every dinner.

CHEMICAL ANALYSIS

Protein	19.89
Fat	62.58
Carbohydrates (by diffce.)	6.03
Ash	2.74
Fibre	1.09
Moisture	7.67

How to Prepare and Serve. This delectable Nut is most enjoyable when prepared for serving according to these directions:

Always serve *hot* and *crisp.*

Place in a pan in the oven. In about 5 minutes the outer skin will become brittle and can easily be removed. Replace Nuts in slow oven 15 or 20 minutes, or until brittle. Do not break Nuts: serve whole. Serve hot with salt.

Or

Practically every household has a hot case. Forty-five minutes on the top shelf of your case will make the Nuts brittle. The outer skin can be removed after 15 minutes.

In a dry place or in an airtight tin, these Nuts will keep a long time.

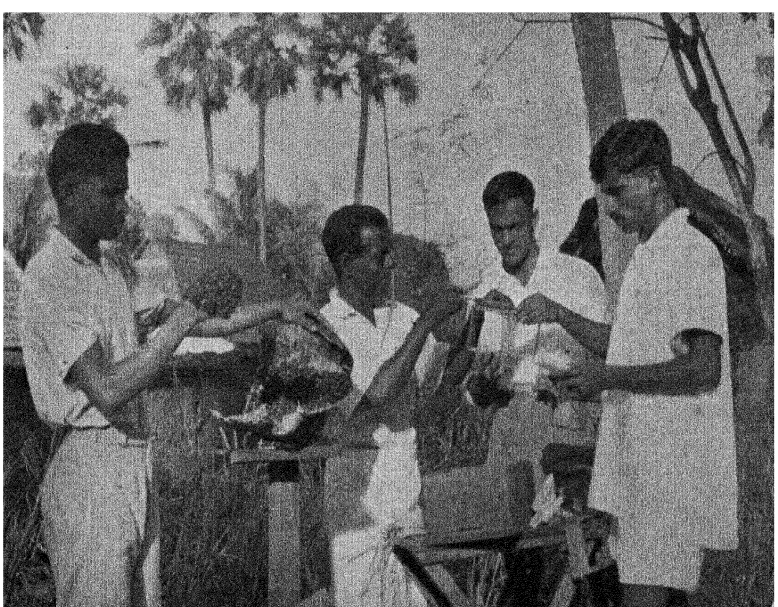
Delivered at your door prepaid anywhere in India by V.P.P. (in South India shipments may be made by railway).

Friends have advised us not to bother with the Indian market, but to ship to America. But what do our poor villagers know about the science of international trade in perishable products or of the many a slip and complication that is between Tuticorin and Kansas City? We do ship to America and to Europe when orders come, but we do not emphasize the foreign business. Our cashew nut marketing is a simple mail order business, all the process of which our villagers can understand and perform themselves. And they can ship daily from the little thatched, mud-walled post office on the road near the Centre.

Palmyra Sugar. The refined 'jaggery' which we are teaching the villagers to produce and helping them to market, we call palmyra sugar. The juice of the palmyra, boiled down, is such a delicious product that without any addition it makes approach towards being as attractive to the taste as the renowned maple sugar. As it is, it makes



THE CASHEW NUT CLUB RECEIVES PAYMENT



PRACTICAL STUDY AT THE TRAINING SCHOOL

Students transferring bees from old pot to modern hive

a good sweet for desert, and it should be used freely in both European and Indian cookery. With all its natural minerals it is so much more healthful than ordinary white sugar which has been demineralized. We are getting out a cookery-book to guide house-wives and others in the use of this natural, healthful, nourishing, delicious sweet.

But as the villagers have been making it, it is so full of dirt and impurities that they must accept a low price for it. It is a sticky product and picks up more dirt as it lies and moves about in the markets and bazaars. The producers have to pay costs also of outside firms collecting the jaggery. This cost can be saved by their bringing the jaggery together themselves co-operatively.

Jaggery-making is our largest cottage industry in this area. Some of the boys of the rural high school adjacent to our Centre were the first to take up palmyra sugar-making. Working with their mothers they turn out a delicious product, keeping the sap clean as it is brought down by the climbers from the trees, and boiling it down in their little cottages. It is moulded into convenient-sized cakes under our supervision and wrapped attractively in butter-paper in one and three-pound packets. It bears the printed label 'Martandam Palmyra Sugar, Guaranteed'.

Besides eggs, cashew nuts and palmyra sugar we have so far sold, through our Centre, pineapples and pineapple plants, papayas, plantains, ginger, vegetables, tree cotton, milk, ghee, tamarind, pappadams, honey, bees, bees-wax, bee-keeping equipment, goats, poultry and poultry supplies, mats, fans, baskets, palmyra-leaf Christmas cards and cloth of various types made in our weaving school, knives, *kuftgari* sliver work, books, rural games and equipment. The Centre caters for rural conferences, retreats and camps and has shown that it can provide, very satisfactorily, all the food needed.

Co-operative Credit

The strong co-operative trio—co-operative credit, co-operative production, and co-operative marketing—help each other and never should be practised singly for long. We started with credit societies which first applied themselves especially to helping the people to get out of otherwise hopeless debt. Very soon, however, this credit came to be used toward co-operative production—to furnishing money for better stock, seeds and equipment in order that the borrowers might increase their products in amount and quality, and receive the greater returns therefrom. The co-operative marketing was immediately needed to help to sell those better products and to bring to the producers the better price and more money these products deserved.

For the co-operative credit, which started first, much personal, repeated visitation and nursing was necessary. One Indian secretary spent the greater part of his time for some years on this—finding in each village the proper man for secretary, training him, and then instilling in the people of the community the whole broad idea of co-operation and how to use it advantageously. Holding fast to the principle of giving loans for productive purposes only, the credit societies were formed and nurtured.

These three anecdotes in a letter from a rural secretary are typical of the countless simple ways the village co-operative societies are helping the very poor:

'An eight-seater Ford car used as a bus was the only means of earning a livelihood for a man and his family in Nagercoil. The motor went out of order. The man and his large family were actually facing starvation, since he could find no one who would lend him the money for repairs. Then the wife and mother related their miseries to the secretary of the co-operative society, who is a sympathetic Christian gentleman. The society advanced a loan of Rs 40, the amount needed for the repairs. The poor man

was soon earning about Rs 5 per day, and repaying the loan in instalments.'

'At Parassalai, one day while I was talking with the secretary of the village co-operative society, a bullock cart loaded with crude sugar, or jaggery, and drawn by a pair of old bulls, passed. The secretary drew my attention, and said: "Those bulls were bought through a loan of Rs 25 to poor Levi, the driver. Levi has paid back Rs 9 out of his daily earnings of about Rs 2, and says that when the whole amount is paid, he wishes to buy, with the further help of the society, a better pair of bulls with which to earn a better income."'

'At Amaravilla village, a young man, failing to secure a village schoolmaster's post, wanted to earn a livelihood by market gardening and raising goats. As a member of the co-operative society a loan of Rs 15 was taken. With it he bought a goat and two kids. Within a few months he sold the two kids for Rs 15, repaid the whole loan, and the goat became his own.'

The record of loans which were given through the first five years in the co-operative societies organized and nurtured by one Indian secretary,[1] pioneering for our Association the co-operative work among the poor in rural South Travancore, shows they were given for the following purposes: (1) payment of prior debts, (2) purchase and improvement of land, (3) purchase of farm stock, (4) purchase of seed, manure, agricultural equipment, (5) educational expenses of children, (6) purchase of houses, house-sites and repairs to houses, (7) loans to weavers and artisans for implements, (8) for helping persons to start petty trade or business, (9) purchasing food grains and other necessaries, (10) marriage expenses.

A glance through this statement of the nature of loans will show that with the possible exception of those in the last category they are all for productive purposes. Even those given for marriage expenses prevented the

[1] S. Manuel.

contracting parties from borrowing money at usurious rates and getting into perhaps eternal debt thereby. In every case the parties were urged to make the marriage ceremonies simple and inexpensive. The man inextricably enmeshed in debt, having no hope of ever paying off more than the interest, joined the co-operative society, took a new loan of the amount of his loan from the money-lender, paid that loan and was then paying only 7 per cent interest, as compared with from 12 to 300 per cent which he had been paying. He now had a chance to begin paying off the principal. The usefulness and help of the other kinds of loans can be readily imagined in the light of the conditions and needs which have been stated in other chapters. Loans in connexion with our weaving school may be given as an example.

Poor boys are graduated from the school. They are now equipped with the knowledge and ability to weave, but they are helpless. What use is it knowing how to weave—without a loom ? As the Rs 40 or 60 required for a loom is a large sum of money to a poor boy—ordinarily an impossible sum. But he can now, on the good reputation he has established in the school, join one of the co-operative credit societies ; take a loan with which to purchase a loom ; and immediately begin making and selling cloth and paying back the loan in small instalments.

It is always a joy to be present at a meeting of a village co-operative society ; to have the members who have taken loans stand up one after another and each one tell for what purpose he took the loan, what he accomplished with it, how much of it he has paid back, or when he finished paying it all back.

It should be borne in mind that much of this loaning had been done among people lower in the economic and social scale than other agencies were touching. That was its object. This work had to be pioneered in a very personal, even brotherly, way. The secretary had to go into the village, convince the people that in co-operation there was a chance for help, explain to them its workings,

find an enlightened, trusted man to be secretary of the society (in a village where we had a local association this was easier), teach him how to keep the books of the society properly in standard books which were supplied, visit the young society often, and help it on to strength and ability to manage itself.

As the system became better established the personal touch, though always valuable, was not so essential. Government appointed more organizing agents. It appointed the above-mentioned rural secretary as one of its honorary organizers. It became possible for us to turn more of our attention to other uses of the co-operative method. I have however to record a disappointment in connexion with turning over these co-operative societies to a less personal agency. Coming back to study them after two years I find that evils have tended to creep in. Their panchayats begin to speak of unpaid loans as a great problem, when formerly we used to rejoice thankfully that this was never a problem in our societies. They have allowed the economically unsound *chitti* system of loans to become mixed in with the co-operative societies in such a way that some societies have gone in debt because of losses on *chitties*. This is an unholy alliance. This experience is a warning of the truth that such pioneering work in economic betterment must be a personal thing and official routine cannot too soon (if ever) take the place of brotherly guidance.

As I travel about in other areas, I find widespread criticism and even ridicule of the co-operative system because the societies are in such bad shape and loans are not repaid. Analyzing this trouble I find the cause in nearly every case to be *lack of proper supervision.* There must be personal supervision all the way—supervision of the giving of the loan to see that it is for a known productive purpose, supervision over the borrower to see that he spends the money for the agreed purpose, supervision to see that he looks well, diligently and energetically after the project for which the money is spent, supervision to see

that the money is paid back when due. With adequate, all-the-way, supervision, co-operation will succeed; without it, it will fail.

Arbitration—The Co-operative Panchayat

The curse of litigation in India is well known. It is one of the grave causes of debt and subsequent poverty. In the West an ordinary man would never expect to have any litigation in his whole lifetime, but the extraordinary fact that litigation is something to be anticipated in India is evidenced by the Government of India Act providing for Co-operative Arbitration Societies of which men are urged to become members.[1]

Government is attempting now to establish again in the villages the old panchayat and perhaps the duty most prominently assigned to it is that it performs a judicial function and takes care of some of the work of the courts. We nowhere find much difficulty in getting together a panchayat capable of responding to the training offered by our secretaries.

Arbitration is one of the most valuable products of our village co-operative work. The ordinary co-operative society is an important institution in a village and the villagers are proud of it. The committee of the society is looked up to. It is in a position to act as a panchayat. The society stands for economic saving. It is quite natural that its honoured committee, actually called the co-operative panchayat, should be looked to to save the toll of litigation, as well as to promote accord and good feeling.

So it comes about that the co-operative panchayats handle a number and variety of cases which would

[1] (*a*) To provide a means for the equitable settlement of disputes and thereby save them from the trouble and wasteful expenditures caused by false, frivolous and unnecessary litigation; (*b*) to provide a means of defence for members against such litigation initiated by others; (c) to secure, when necessary, professional legal opinion for the assistance of members. (Bye-laws of Co-operative Arbitration Society under Act II of 1922)

otherwise go to court. Members of the societies and our rural secretaries persuade him who has 'aught against his neighbour' to take his grievances to the panchayat and persuade the neighbour also to agree to abide by its decision. The panchayat hears both sides of the case in a simple and unofficial manner and renders decision.

In one or two villages near one rural reconstruction centre which makes arbitration through co-operative societies a very special feature, the *vakil* (lawyer) has been eliminated almost entirely. I know one or two splendid-spirited young lawyers who have seen the rightness of the movement and have assisted in persuading prospective litigants to arbitrate. Arbitration is one of the finest fruits of co-operation in our area.

Carry-over from Co-operatives

A prominent question on which sociologists are not yet able to agree is whether there is any carry-over from the co-operative society that makes the members more efficient in performing other useful functions in the community. For India, I can answer this in the affirmative from experience. The carry-over is at least of two kinds.

Establish a co-operative society in a village that has not even a village association of the kind already described. The intercaste co-operative draws into the membership, out of their similar needs, formerly ultra-individualists. Such men find themselves associating in a very personal business venture (this form of co-operative society is personal) not only with other men, but even with men of other castes and creeds. The individual member finds himself benefited by this kind of association, formerly unknown to him, and he experiences also joint liability with members of other castes—joint liability, but still for his benefit. We can find quite clear evidence in the various villages that such a member becomes willing and even keen to join in other inter-communal ventures for his personal and the general good.

The other kind of carry-over of which I have plain

evidence is really a matter of business. Except in the money-lender and certain other clever individuals in the usual village, there is the previously mentioned general unbusinesslike tendency to let things take their course—to be 'easy going'. There is even the feeling that the course of things is preordained and that there is not much use of trying to be methodical, definite or businesslike—not much use to be on time; tomorrow is as good as today. 'Tomorrow' in the various vernaculars has been said to be the most oft-used word in India. And when a man says he will do a thing 'tomorrow' he does not mean the following day, as he is often misunderstood to mean. He means some time in the future, which he probably conscientiously feels will be just as well.

Into this situation comes the co-operative society, and the very first thing presented is a very definite, regulation set of books, a system of book-keeping and a procedure which must be followed. All the members are very soon able to see how the business of the society works. They see that unless these simple rules are followed the society cannot be healthy. They see how punctual payment of interest and payment of loans means a society of which they can report with pride (as they are so fond of doing) —a society of benefit to each and every member. I have seen the effect of relationship to co-operative societies carry-over even in certain of our employed secretaries who, however rich in other qualities, were weak in efficiency and who were unbusinesslike. Village associations and other village institutions are often ineffective because they run on lines of the least resistance—mostly on meetings which are easiest to call, with little planning or thinking or system. I have seen the effect of participation in the co-operative method carry-over to make these other institutions accomplish more worthwhile results.

The principle of co-operation is used as a method of helping to accomplish those lines of improvement upon which the rural people venture. The individualistic tendency not to co-operate, existent in all rural people,

is multiplied in India because of caste. In former chapters it has been emphasized that it is necessary for the rural family to be 'surrounded with benefits', helped, not piecemeal but on all sides of their lives. In order for this to become a reality, individuals and families cannot act separately; the community must come to act as one body.

We find that in the rural Indian community where co-operative societies have been successful, the people have learned to work together, and the more ably and quickly take up and accomplish any new project upon which they decide. Their ability to accomplish is striking in comparison with the community which has not learned and practised co-operation.

CHAPTER XI

THE RURAL DRAMA

Footlights and Moonlight

'That's the best Devil I have ever seen!'

He was a most devilish Devil. The fiendishness of his get-up and the Satan-likeness of his acting brought this enthusiastic remark from a Western sociologist who had seen many Devils. He was taller than his fellow actors. He had tusks in his mouth a foot long which worked up and down with the moving of his jaws. He had horns to match. He was dark, but his brief skirt was darker, made from an old umbrella with the ribs left in. His face was hand-made of cardboard, so skilfully modelled that the desired Luciferian effect was all there. He carried a cruel three-pronged spear and a lighted torch.

We were at a Rural Drama in an isolated, roadless village. An anouncer told us in the prologue that the play was written in that village, that all the actors belonged to the backward classes, that most of them were palmyra climbers and had not been in school beyond the third class. The visitors marvelled at the talent displayed that night.

A play put on at the rural Centre will bring out a large audience of people from many villages, some of them walking in a distance of ten or more miles. The country folk always try if possible to stage such events on moonlight nights. The brilliant Indian moonlight is a much-appreciated boon and safeguard to those who walk barefoot in the night.

The presentation of dramas is one of the oldest customs of India. The Sanskrit drama flourished during the first centuries of the Christian era. Some of India's greatest poets have left unique contributions to the art of literature as well as to the art of the drama, in their plays. There is every reason why the India of the present should take advantage of this ancient heritage.

The drama is used in our extension programme as a means of education, entertainment and socialization. It is peculiarly effective in education because it brings out a greater number of people of all castes and creeds and both sexes than any other educational method. It is also effective because facts and ideas presented through this medium make a deeper and more lasting impression than other forms of teaching. The sombreness of the rural life in which there is so much poverty and distress makes here an unusually great need for wholesome entertainment.

The hindering effects of caste make urgent the need for a common social platform. How few opportunities there are for all to meet together. The service of the local association and its programme in providing a common platform for social life and community improvement has been described. It is really remarkable how in orthodox communities all people, including orthodox women who do not ordinarily appear in public and who would never attend a lecture, will come to the drama. When all classes of people meet together in the atmosphere of good spirit which a drama provides, there is real advance in socialization.

In the most rural village, anywhere in India, we find extraordinary interest, emphasizing the fact that the dramatic tendency is inherent in the Indian nature. This inherent tendency makes for much real ability. The pity is that the art has declined and that presentations are so infrequent. What remains of the old heritage that is as yet untouched by outside influences is naive and picturesque.

In a form of survival of the old drama our West Coast

villagers are visited by a troupe of players which puts on the stage Puranic stories in the form of pantomimes and *natakas* or dramas. We have a celebrated Malabar pantomime known as *Kathakali.* It is fascinating to watch. Weirdness and grotesqueness are outstanding characteristics. A big landlord or leading citizen may take the initiative and form a troupe of players which will be sent around. This will be after the monsoon. When a troupe comes into a village, a well-to-do and influential man of the village is expected to make arrangements for a performance. He pays the expenses of the troupe for that day together with a small donation which seldom exceeds Rs 10. The villagers can witness the performance free of charge. A troupe's reputation depends a great deal on that of the person who organizes it. When the pantomime takes place in the local temple the *devaswom* authorities are bound to meet the day's expenses of the players and the donation is dispensed with. Having travelled from place to place the troupe returns at the end of the season to where it started and the members engage again in their respective occupations. They go on the road the next season in the same way.[1]

There are various ways in which Puranic lore is taught through the Drama. A particular caste, the Chakiyar, recite certain Sanskrit *slokas* illustrative of stories from the Puranas and interpret them with wit and humour. This is so well done that there is much laughter and enjoyment in the audience. In another form called the *Ottam Thullal* another caste, the Banniyar, recite with gestures, in short Malayalam metre, verses dealing with Puranic stories. While the above are indigenous to Malabar, travelling *sastrigals* often visit the Tamil Brahmin people of our area. They read Puranic stories in Sanskrit and interpret them in Tamil. 'In every decent home a member of the family reads stories from the Puranas to the other inmates in the vernacular. They listen in rapt attention

[1] See Subbarama Aiyar, *Economic Life in a Malabar Village*, pp. 141-6.

and sometimes engage in lively discussion. Tamil Brahmin ladies usually learn by heart Puranic stories in the shape of songs which they recite in the leisure hours of the noon. The lower castes have their own Malayalam versions of the Puranas.'[1] Songs are a very important part in practically all Indian drama. Sanskrit is generally recited in a peculiarly dramatic manner which adds interest.

There is another common form of dramatic entertainment in India called the *Kalakshapam.* It is especially popular in the village. It consists of singing a story in a dramatic manner. The singer usually accompanies himself with a musical instrument, or is accompanied by another player or drummer. This ancient Hindu art form is also carried on by the Christians who sing Bible stories. Various incidents in the life of Christ, His parables and other Bible portions have been put into lyrical form and published. This method attracts large audiences and holds them enthralled for hours. The method is especially effective when it is combined with lantern pictures, thus making a three-fold appeal to the eye, the ear and the emotions.

The majority of actors outside the large cities of India are amateurs who can give only their spare time to the drama. Many of these actors find a social satisfaction in amateur dramatics and make this their chief form of recreation. It has been mentioned that one of our main aims in using the drama is socialization. No doubt the class in India most interested in the drama is the most conservative class, namely, the Brahmins. They furnish the incentive for many dramatic performances and for many amateur societies. Some of them write plays. Then others join with them in producing the plays and in the acting. All castes and creeds meet in the audience and sociological advance is furthered.

The universal appeal of the drama brings out great numbers of spectators whose interest and enthusiasm are so strong that they will remain throughout a show lasting most of the night in spite of the uncomfortable temporary

[1] Ibid., pp. 146-7.

quarters. In fact, we have to make the shows long to satisfy. Persuasive advertising is not necessary. Word need only be passed on from mouth to mouth that there is to be a drama, giving the place and the time.

The drama as presented leaves much to be desired. Owing to the lack of facilities, equipment and technical knowledge, the preparations for the drama are generally insufficient. A critic can always see many possibilities which have been left untouched. The actors, though enthusiastic, do not realize the necessity of memorizing lines, which means an excessive amount of prompting and often dangerous improvising. Indian actors are extraordinarily clever at improvising.

There is a dearth of good plays which allow simple enough settings and staging for rural amateurs. Popular stories are dramatized and presented. It is regrettable that so much work is frequently done in producing a poorly written play. Often such a play is written overnight by a *vakil* or other friend of the players. Even a playwright genius could not turn out a play worth acting under these conditions. To illustrate better the need of simple plays appropriate to the rural life and actors, it may be mentioned that Mrs Hatch wrote such a play for a particular performance of the boys in one of our villages. An editor got hold of the play and printed it; and within the course of the year this play, intended only for local use, had been translated into nine vernaculars and had been staged before thousands in various parts of India, Burma and Ceylon. Now after six years requests still come for permission to translate and produce it.

There have been periods in practically every country when the stage has been in disrepute. Such was the case in India. Emily Gilchriest Hatch writes in *The Indian Theatre*, 'According to the laws of Manu, an actor was classed with one who marries an outcaste, a keeper of a gambling house, a drunkard, a criminal, a betrayer, a hypocrite, a usurer, a white leper, a madman, and all must be avoided! Conditions too must have changed, for the



THE *Ottam Thullal* IN FULL SWING

introductions of the plays refer to the poets as the personal friends of the actors, and a poet of tolerable merit in India, under the ancient regime, was the friend and associate of sages and kings. If there be traces of the low and unsavoury, there are traces of a higher side to counterbalance.'

Some people object even now to the drama. It is so in any country. The need is to establish in the minds of all that the drama in itself is one of the highest forms of art. It, like all other good things, can be misused. Some of the Christian missions have felt it necessary to prohibit the enactment of dramas on mission property. This has created opposition from Indian members of the missions who are drama enthusiasts, especially the younger people, and has created a delicate problem for us who believe so whole-heartedly in the use of the drama. The main cause leading to this prohibition was that the actors, enthused by the applause of the audience, allowed indiscretions to creep into their improvised speeches. Careful preparation, choice of plays, insistence upon learning lines, and supervision, will obviate this invasion into the true realm of the drama.

The Drama in Rural Progress

The drama is one of the most useful aids in our rural reconstruction. My colleagues and I are especially fortunate for we have to guide us in our dramatic projects Emily Gilchriest who, before she left her chosen and much loved profession to come with me to India, had completed her college course in dramatic art and was winning success on the stage as well as in teaching dramatics, pageantry and æsthetic dancing. Her interest, study and practice have not abated but have simply turned Indianwards. She is my companion and counsellor in all I do, but in the rural drama project my colleagues and I are conscious that, here especially, we are teaching 'self-help under intimate expert counsel'.

The aim is to bring, so far as possible, the best of the

theatre to rural places, encouraging the production of high class, even literary, plays for cheering drab existence, for education, for heightening ideas and ideals, for joy of working together, and even for culture. In order to carry out these purposes, especially the educational one, we find it necessary to write some of the plays, or have them written especially for us. Plays which embody teaching in connexion with special projects we find especially useful. The danger in plays written for such purposes is that interest and art may be sacrificed. The prospective playwright should remember that the first duty of the drama is to be interesting and entertaining. A play can embody true teaching and still be highly entertaining and not pedantic.

A large crowd had assembled from many villages to see the show which was to be given after dark on the last night of our Practical Training School in Rural Reconstruction. It was good to see the lean farmers and farm labourers, calloused on hands and bare feet by hard labour on the soil, feeling that this show was theirs and that a shirt was not necessary to entitle them to a good seat on the ground. Many of them were sitting right down in front eagerly awaiting the curtain.

Interest rose to the point of absolute forgetfulness of self and all their poverty when—could they ever believe it—across the front of the stage walked a cow,—yes, a real one —and then another! One was a well-cared-for cow of the improved breed which we are now making available and the other cow was a small thin ordinary one of the locality. The cows were accompanied by their owners, who talked about cows; and the cows, through their interpreters, also conversed. The farmers in the audience excitedly nudged their neighbours and began to talk about these unusual utterances of this unusual show which was dealing in most usual everyday things—cows. Everybody talked at once. Poking one another in the ribs, they repeated what the actors were saying—then listened. The actors might wish for more silence, but never for a better 'capture' of their

audience. The play was an unqualified success—and the audience were learning things so vividly that they never could forget them.

The curtain went down on this one-act play, 'Moo-cow-moo'. Would the inevitable buffoon, the fool, appear in the interim? Here he came, right down into the circle in front of the stage. Not one but two! And one buffoon was a rearing, bucking, splendid, snow-white Surti he-goat, and the other his tall lanky care-taker. They put on as good a fool show as could be wished, bringing forth that throat-aching laughter so rare in the villages. The goat seemed to enjoy it all as much as the audience. He was full of life, did some spectacular, high-in-the-air, rearing and butting of his master; and incidentally he taught everyone there, both men and women, that he was the kind of goat to have.

Then the curtain rose on 'Cock-a-doodle-do', and there were the chickens in the typical rural Indian market place, the old women and the loud chatter, the little squabbles, the talks about ordinary and better chickens—ordinary and better care—small and few eggs—more and bigger eggs—better ways of selling—poverty prices, big prices. The audience were again on the edges of their ground seats. When a vigorous white Leghorn cock suddenly escaped from one of the actors and ran off the side of the stage, a man in the audience jumped up and shouted: 'I'll help you catch him'. The audience had so entered into the spirit of the play that the show was their show. Audience and actors were one in producing it. The zenith of dramatic effect which is so elaborately sought after amid the dazzling white lights of Broadway had been attained in the rural Indian village.

The Rural Demonstration Centre and its equipment, staff and honorary workers give the essentials for model or demonstration staging of selected plays. The country people, men, women and children, rich and poor, of all castes and creeds, come walking in from near and distant villages They come to see and they go back wanting to

stage good plays in their own villages. This is the aim of the drama project. The rural secretaries are ready to give counsel, to help in providing plays, and to advise in staging and coaching. The local village association members are generally active in organization and participation.

The Circuit. It is desirable to get the maximum amount of enjoyment and benefit from the efforts of the particular group who stage a drama. This can be effected by the circuit method. The performance of a drama in the home village is an event. It is an even greater event to perform it in another village. And it is a great and proud event for that village to have a drama played for them by a visiting company. We make all effort to bring about the interchange of playing from village to village. This is really an economy measure which we use with other kinds of programmes which are sent round to as many different associations and villages as possible.

It should be mentioned as a minor point that the drama, having the advantage of greater appeal than most other projects, may aid in financing these others. Since the attendance inclines to be so large, the drama can do this with very little tax on the individual. Thirty young men who were studying in the night schools of the Ramanathapuram Centre staged a number of plays. The average attendance at these plays was five hundred. On one night, partly to test further the popularity of these dramas and to see if people would come when they had to pay, spectators were admitted by tickets. One half anna (one cent, a half-penny) admission was charged. Thirty rupees was collected at the gate. This means that the attendance that night was 960.

We have plain evidence in our villages that the use of the drama has contributed to education, entertainment and socialization. And in the hearts of our rural people there is a desire for many more plays on many more moonlight nights.

CHAPTER XII

SHOWING THE RESULTS

RURAL EXHIBITIONS[1]

A GREAT arch is erected across the gateway of the Centre welcoming the people of Travancore to the annual Rural Service Exhibition. The whole place is decorated with ferns and bright-coloured, home-made, paper flags and streamers. Boy Scouts in a fern-covered booth at the gate gaily make a somewhat musical, big, invitational din with drums and horns.

Upon entering the grounds one is first attracted by the large exhibit of poultry extending along three sides of the gardens. There is evidence, this year, that the villagers have learned that only the best fowls can win in this competition. The grade of fowls is high, showing most careful selection on the part of the villagers before sending in their entries. There are exhibits of single hens and pullets, single cocks and cockerels, pairs, breeding pens, broods of seven and more chickens, and broods of chickens over two months old. White Leghorns are present in greatest numbers, but there are a goodly number of Australian Orpingtons, some excellent Rhode Island Reds, some Black Minorcas and a good show of Indian Games. This year the cross-bred fowls which are more easily within the financial reach of the poorest villagers, are very hardy and a great improvement over the country fowls, are shown in goodly

[1] The term 'exhibition' is used in preference to 'fair' as better expressing a showing of the products of the village or country-side in friendly competition, direct sale being at the most a very minor object. 'Fair' is more commonly used to designate a gathering of buyers and sellers, or special assemblage of goods for sale, but the term may be used in place of 'exhibition', as may the term 'show'.

numbers. This is the result of the extra emphasis the Demonstration Centre, after much study and experimenting, is putting upon cross-breeding. Leghorn and Australorp crosses predominate. The large numbers of young chickens shown this year are indicative of the losses from cholera and of how the people are making every effort to raise enough young stock which will more than replace the ones lost. There are very few country-fowls, owing largely to the fact that the eggs of pure country-birds are not big enough to sell in the co-operative market we have built up, and the people are coming to see that they do not lay enough to pay for keeping them.

There is an especially interesting competition in the eggs section. Here we see that in some instances the eggs of cross-breds are as large as or larger than the pure-bred Leghorn eggs. Some of these balance the scales at 2½ ounces each. An incubator, correctly-timed, is turning out a flock of fluffy chickens and is constantly occupying the attention of interested onlookers.

A good showing of turkeys indicates that the local breed is fairly good. There is competition in models of poultry-houses suitable for the villager to house twenty hens and costing not over Rs 10. The competitors have built these models on the exhibition grounds. There is also an interesting competition of collections of at least six home-made appliances for the poultry yard such as feeding troughs, dust baths, water fountains, nests, trap nests, etc., in which the competitors are all boys who have made the appliances themselves.

In the bees and honey department are shown colonies of bees some of which have been brought several miles in hives. They are especially strong colonies and one at least has a good supply of honey even up to the fourth-story super. Several exhibitors have also brought displays of honey produced in their own apiaries. Supplemented by the Centre stock, the honey exhibit comprises about a hundred bottles-full, attractively labelled. A line of bee equipment is also shown.

In the cattle section there is a display by the Travancore Government and the YMCA of Sindhi Karachi cattle. The competition of milch cows with Sindhi-cross calves by their sides has brought few specimens owing to the 'evil eye', the superstition that makes owners of these animals fear that evil would come upon their animals were they brought to the show and admired by many people. There is a class for milch cows of any breed. There are milch goats, most of them with two kids each.

Agricultural and garden products are shown. In each case the exhibit has been grown by the exhibitor. The co-operative marketing of cashew nuts through the Centre has brought out some excellent exhibits of these nuts.

There is a showing of locally-made palmyra baskets, mats, and ropes; and also a class for like articles in bamboo. Spinning and weaving products make a very good exhibit. There is hand-spun yarn, khaddar, and hand-woven cloth from machine-made yarn—the product made in every case by the exhibitor.

Several appetising-looking exhibits of refined jaggery—palmyra sugar—in various shapes and weights are on the tables. The attractive style in which it is wrapped, labelled and marketed is shown.

As boys and girls are given a large place in this attempt to introduce improved stock and methods for the economic development of the poor people of the villages, there are boy and girl exhibitors in all the above-mentioned departments. There is also a department exclusively for boy and girl exhibitors including hobbies and handicrafts. Collections of stamps, coins, a class for book-binding, one for other handicrafts, drawings and prints, models and maps attract a great deal of interest. Some of the collections represent most careful observation and search as well as discriminating arrangement on the part of the boys and girls. The needlework of the girls and the drawings of both boys and girls show some high talent and careful application.

The Travancore Agricultural Department is exhibiting besides cattle some specimens of agricultural implements, samples and improved grains, manures of various kinds, and a large number of charts describing how to battle with various pests, what sorts of manures to use according to soil analysis, etc. There is a small showing of products made by private firms. The poultry, cattle, bees, goats, garden plots, weaving school, central library, latrine borers, demonstration latrine and other sanitary equipment of our Demonstration Centre can also be seen.

Such an exhibition under our village conditions brings together most of those interested in the vocation or vocations represented in the exhibition. It gives excellent opportunity for conferences of poultry men, cattle breeders, cashew nut, honey and jaggery producers, general farmers and others.

At the first four of these annual central shows small money prizes were given. With such poor people money prizes seemed almost a necessity, as they helped to compensate exhibitors for the small costs they went to in order to exhibit and which they could ill afford. But during the last eight years no money prizes have been given. The prizes were mostly good quality brass vessels and articles which are much prized in the homes. The satisfaction these prizes gave was encouraging and several of the winners said they were even more acceptable than money. As far as possible it is well to give articles which will help to further the village vocations, such as equipment, breeding stock, birds, and plants; but in this case the greatest care must be taken that the persons who get them will use them to the best advantage. If a pure bred cock, for instance, is given as a prize, the winner must be one who needs and wants a cock of that breed.

Some of the awards are special ones, offered by prominent persons, such as for 'The Best Bird in the Show', or 'Progressive Poor Man's Prize', the latter for the poor man who in the opinion of the judges had taken best advantage of the benefits of the reconstruction programme

as evidenced by his exhibits. The owners parade their winning exhibits so that 'why they won' may be explained. 'The Best Bird in the Show' as selected by the judges last year was a very large Australian Orpington cock. He was shown on the platform at the time of the prize-giving. Then when the large audience demanded to see the owner, a small boy came forward, mounted the platform and proudly held up his 'best bird'. One rural teacher who entered nine exhibits in various departments of the show won nine prizes which he and his small children were seen proudly carrying away with the birds and their other exhibits.

A visit to this show cannot help but be an encouragement and an inspiration to all who see it, and nothing serves better than a competitive exhibition to induce more and more villagers to have profitable crops and live-stock, to practise the improved methods and to get the benefits therefrom.

The village exhibition is another means of education—another means of demonstration. It is one of the best means for increasing interest and pride in local achievement. It gives an opportunity for the exhibition of the best products of the community. The spirit of co-operation is fostered in that this is a community enterprise in which large numbers can take part, and all can attend. It affords opportunity for wholesome community recreation. Through all my early years at home I and other youngsters looked forward eagerly to the annual fair as the great event of the year; and later one of my findings in a social survey was that the country fair held by the local agricultural society 'comes nearer bringing the whole community together than any other event. It also brings the local people in touch with those from a distance.'

In Indian country parts it is very important to let people know early about the shows. In this area the people are urged at the preceding show, a year ahead, to begin getting their live-stock and poultry ready for the next exhibition; and as reconstruction workers meet them in their villages

during the year they remind them of the coming exhibition. Two months before the show a definite prize list is put out and the sections and classes under which exhibits may be shown are explained to the people. These prize lists as well as the coloured posters which are put up in the villages are printed in the vernacular.

The success of an exhibition is partly measured by the people who see it. More widespread advertising in the villages and extra attractions such as an opening meeting with prominent speakers and music, a musical variety entertainment, and, on the last day, the prize presentation meeting followed by a health cinema show, attract very large crowds. The students of the Training Schools in Rural Reconstruction coming from various parts of India, Burma and Ceylon display real talent and contribute much to the entertainment.

The poultry and other stock has to be protected from sun and possible rain. Sheds of bamboo frame and thatched roof are put up several days before the show. There is always the problem of show crates for so many birds. The Demonstration Centre now has a large number of knock-down crates of wire netting on wooden frames. These are placed in position under the sheds before the entries begin to come in. The sheds, the whole grounds even to the posts under the bee hives, are beautifully decorated with ferns.

The length of the show is only two days, as it is found a bit difficult to keep the birds and other animals happy for a longer show. This means that the entries must close on the afternoon before the first day of the show. These factors have to be emphasized early in the advertising in the villages. It is essential that judging should begin in the morning of the first day, which means that all entries must be in position by that time.

Besides the central show, each individual Indian village should have its local exhibition, fairly simple (but it is nevertheless a big event for the village, attracting a goodly number of people from surrounding villages and

country-side). The local exhibition in each village is of primary importance, and it encourages local people to exhibit products at more distant exhibitions arranged for the whole country-side. The best place for the central exhibition at present is the Rural Demonstration Centre of our area. From ideas and knowledge the people of any particular village get at the central exhibition, they can more readily and intelligently go ahead in arranging one for themselves. We have been immensely gratified to see how this idea has caught on. Nothing can be so encouraging to rural reconstruction workers as to be able to count more and more places and people copying what they demonstrate. Even the boys and girls of some of our very rural villages are putting on shows, the excellence and magnitude of which surprise us; and the other strikingly encouraging thing is how much the second year village show excels the first one and so on.

The whole idea of a rural man exhibiting his products has to be cultivated. Superstition and custom help to make him reluctant. I suppose Government Departments would say that the chief difficulty with the shows is that Government itself has so largely to make up the whole exhibit, even sometimes to buy articles to show in order to have them there, and that there are not enough exhibits from the people. One of our great encouragements is that as a result of personal teaching and persuasion the people will now make these shows more truly their own.

It was in October 1926, about two years after the better poultry project was launched, that our first Travancore Poultry Exhibition was held at Martandam. Our other projects had not developed so far, and this first show was confined to poultry. The chief improvement in the annual shows which have followed this first one, apart from coming to include many kinds of products, has been in the quality of exhibits. At first the people brought whatever they had, seemingly with almost no discrimination. They now know pretty well what a good fowl or other good product is. One bit of technology which has brought

improvement in the exhibits is that the Rural Centre sends out some weeks before the exhibition, as an educational feature, printed instructions telling the villagers how to prepare their exhibits for the show.

One of the chief results of exhibitions comes through exhibits selling for good prices at the show. In the first show a trio of birds shown by a poor man won prizes to the amount of Rs 5 and then sold for Rs 20. There was great excitement, as the village mind had never thought three chickens could ever bring so much. This encouraged many to take up the industry. But one of our problems is to keep up the quality of stock in our area in the face of the natural selling off of the best. How can the very poor resist a big price? How could my outcaste Sambavar friend whom I started in business with white Leghorns, and who proudly takes from his pocket and shows a first prize certificate he won, keep from selling entirely out of poultry-keeping when a good price was offered? He couldn't. He now has only the certificate to show. His present small part in the poultry business has one advantage, that he can carry it about with him in his pocket at all times.

I have recently imported a new heavy laying strain of Leghorns to counteract the tendency towards deterioration in quality. We must bring in some such new blood at least every second year. That the villagers are learning values was encouragingly illustrated this year when buyers from such far distant places as Calcutta and Ceylon were able to make very few purchases and even suggested that the people in this area were unbusinesslike since they were not interested in selling. The Indian villager however is rightly credited with having the best mind in India. This good mind makes the villager know better than to sell his birds, which have been cut down in number by the epidemic, when he now has his co-operative marketing and when his laying fowls bring him such good income. He is bent on building up his flock to larger numbers. There are many orders for this fine stock.

Inter-village Competitions. The central exhibition can now well include exhibits of all kinds of products of the area, and it is planned to work toward a competition by villages. Each village will have a section in which to show its produce. Prizes will be awarded to those villages having the best collective exhibit. There is nothing better than inter-village competition to strengthen village spirit and ability to act together. This has shown itself most strikingly in our inter-village athletic competitions participated in by inter-caste teams from villages of this same area. We have witnessed hardly anything else which has so quickly developed a common spirit and sense of village oneness.

It is very important that as far as possible the whole village community be concerned in the local exhibition or exhibit. It should be launched at a whole community meeting. Expenses should be kept low and this is possible since most of the work is done by volunteers. The value of prizes should be small. In some instances ribbons and certificates are enough. Interested persons of means are often willing to donate prizes if requested to do so. In fact this is a form of giving that most of us rather like.

The exhibition becomes a truly educational project when used as one of the means of lifting the community to a happier, more comfortable and better status. If the exhibit is to be educative, the way it is arranged, and what we include in it, is important. Care in this particular can increase its value. Exhibits in India tend to be set up very carelessly without apparent realization that arrangement adds to their value.

We as extension workers try to make sure that exhibits have the maximum educative effect. This applies to the animals, poultry or agricultural produce shown, and especially to the charts such as we use in the market places, educational weeks and also in exhibitions. As in other rural work all these things are novel and even marvellous to the people. Each feature is a bigger event to them than it would be to sophisticated town and city people. Care

in the technology of exhibiting brings marked appreciation and makes for a deep and lasting impression.

We have learned by experience that a recreational and educational programme should always accompany an exhibition. Too much cannot be done to make it a 'big event' in the minds of all the people of the whole country around, and there should be lots of fun. High officials to be patron and president, well-known authorities to lecture, and amusements, are needed to reinforce the simple appeal of the exhibits. This is one place where we want big crowds. Side shows and the commercialized amusements of the ordinary fair are left out. But dramas, pageants, variety shows, athletic contests, cinemas, and lantern pictures will help to give everyone a good time and insure that he or she goes home happy. Different villages may compete in enacting dramas, in athletics and folk dances.

The rural exhibition is one of the indispensable means by which a village or area may promote its social and economic life.

CHAPTER XIII

TACKLING THE PROBLEM OF LEADERSHIP—I

The First Bull-Cart over the New Road

Nearly every man and boy of the roadless village out with picks, shovels, crowbars and gun-powder in order that roadlessness for them shall be no more! During all its ancient existence, the generations who have been born, have lived and have died in this village have suffered the disadvantages of having no road; and every time they entered or left the village they had to cross private land which they had no legal right to cross. Such people are a kind of 'shut-ins'.

Year after year in recent times they have renewed their petition that Government would build them a road. Government, having so many roads to keep up and so many petitions from other roadless villages, considered this a relatively unimportant out-of-the-way one. On dark nights we often took visitors from afar to features of our programme in this village, and some said they had never thought there could be a village without a road to it. As we walked along the villagers ran out to meet us, romantically carrying lights to avoid the rocks and possible snakes. Government did run a survey trace for a longer road which might connect this and several other villages; but this would be expensive. Many more years passed and prediction would not expect anything to be done in the next fifty years.

But in this village, leadership and realization of self-help

ability had been developing. The two types of leaders had been joining hands—doing things: local honorary leaders assisted and inspired by our secretaries. The young men were coming to realize what they could do in the way of self-help through co-operative method. This growing strength inspired the thought: 'Must we wait for ever—must we wait for Government? Can we not build a road ourselves, not by the long trace but by the shortest way out to the main road?' The young local leaders called a road meeting in their little association. They raised some money. They went out and with great difficulty got possession of the many 'fragmented' pieces of land over which the road would go. All the owners except the last one nearest the main road agreed to sell or to give the land. Government here helped to bring a settlement with the last man; and they were ready for road building.

The way was hilly and extremely rocky. Dynamite was not available, so they used village-made gun-powder. It was a rare picture—nearly every man and boy of the village at work.

Recently I attended the formal opening of the road. The village band and a company of loin-clothed children led our cars and procession from the main road. We proceeded along the road, but not only to this village. Having built the road so far they wanted to build further; and the next village, even more distantly roadless, now inspired by the neighbouring demonstration, wanted a road. They had turned out and helped and the new road went well beyond even this second village. The plans are to go on until the road connects with the important highway running parallel with the main road; so the new road will be a main cross road. Of course, the road they have built is narrow and far from finished; but the Dewan Peishkar presiding at the formal opening said that he expected Government would take over the road, widen it and build the necessary culverts and drainage ditches. He pointed out, with great truth, that when people help themselves, Government, as well as other agencies, is willing to help on top of that

worthy effort. Incidentally, from his knowledge as officer in charge of land revenue, he pointed out that when the road was completed the worth of land along the new road would be three times the former value.

The story of this road is given as an illustration of how humble village leaders in the midst of all the adversities of their condition can inspire and rouse whole communities to do big things. The chief leader in this instance was one U. Joseph, teacher and honorary secretary of the village association. He spent all his spare time in connexion with activities for the uplift of the villagers and worked hard for this road. Succumbing to the scourge of typhoid fever, which I have mentioned as so disastrous in our villages, the first bullock cart that went over the new road was the one carrying his dead body. But his spirit, influence and inspiration live on!

Who is a leader? Who is a leader in an Indian village or elsewhere? Any person who is more than ordinarily efficient in stimulating response from others may be called a leader. Both the paid and the honorary, unpaid, leader in our socio-economic uplift work stimulate collective response toward better ways of life and practice.

The average quiet villager in all his poverty does not make himself felt. Men despair of his ever being a leader. Yet there are in this Indian peasant unexplored powers of leadership. In my experience he responds and shows himself a man of affairs, able to lead wisely, as soon as he sees the way and understands the issues at hand.

The Attributes of Leadership

Modern social psychologists claim concerning leadership that it is what the following think their leader is that counts rather than what he really is. That may be true for a one-night actor; but we are considering long-time, intimate leadership in a small Indian village. Here what the people think of a leader and what he is are apt to be about the same thing. Character must square with words in long-time rural leadership. That is, the people must know

him thoroughly. Until they do, their conservatism will retard their response. It seems that the attributes of the leader are essentially the same for all races of people. The attributes which the villagers must believe to be in the leader have been listed as follows : [1]

1. Ability to inspire a following in sympathy with and loyal to the task.
2. Knowledge of situation and clear conception of problem.
3. Sympathy with and loyalty to situation.
4. Ability to solve problems and put theory into practice.
5. Group harmonizer, spokesman, planner, in short, integrator.
6. Initiative, organizing ability, intangible personal factors.
7. Reflecting morals and emotions of group, but may change both.
8. Sufficient strength to carry out project.
9. Willingness to be leader.
10. Faith and hope in the goal sought.

It is contended that all these must necessarily be attributed to every leader, but that it is not possible to discover others that are essential.

The following sixteen points have been put down as attributes of character of the great leaders : simplicity, earnestness, self-control, assiduity, common sense, judgement, justice, enthusiasm, perseverance, tact, courage, faith, loyalty, acumen, truthfulness, honour.[2] The extent to which they are ingredients in the character and personality of a man indicate his value as a leader. The main purpose of giving this list here is to point out four of these attributes which characteristics of the Indian rural people make especially valuable to their leaders—simplicity, enthusiasm, perseverance, faith. I wish to show also that

[1] Nafe, *Outline on Leadership*, pp. 2-3.
[2] See Miller, *Leadership*, pp. 13-55, adapted in *Readings in Sociology* by Davis and Barnes, pp. 592-5.

there are two attributes not mentioned in the list which are essential to the most effective leadership in the Indian village—sympathy and spirituality.

Simplicity. It is noticeable that every one of our Indian secretaries whose life and work are having a great influence toward uplift of the villagers possesses to a marked degree the characteristic of simplicity. This he must possess along with assiduity and acumen, diligence and intellectual discernment. This attribute is the more valuable and essential to self-help leadership. The gentleman who has risen to such a high state in life that he cannot bend to take a hand with the villager in a common task, that he cannot associate intimately with boys, so high that villagers have, in a measure, to stand when he sits, bend when he stands, and take care that their breath does not pollute him, can hand out charity to them, but he cannot lead them in self-help.

Enthusiasm in the original Greek means 'God striving within us'. Valuable in all leadership, it is especially appealing and begetting of interest to the villager whose environment and fellow villagers are characterized by the opposite of enthusiasm—listlessness and hopelessness.

Perseverance is important because in India the mortality of things started is perhaps the highest in the world. A study of projects and organizations started in any place for a period of years will show that the 'expectancy of life' of worthy ventures is as short in days as is the life of the people in years. You can call a meeting and start a society, organization, or project any day, but you can only succeed as a leader if you can keep it going—if you have it in you to do as Kipling expresses:

> 'If you can force your heart and nerve and sinew
> To serve your turn long after they are gone,
> And so hold on when there is nothing in you
> Except the will which says to them: Hold on!'

Faith in the leader has three parts: faith in himself, faith in his followers, and faith in the cause for which he

is striving. Hopelessness in the village makes greater demands on enthusiasm and calls also for strong faith. The leader must have faith in his own ability, and faith in the villagers whose experiences, so far, have given them little reason for faith in their own ability or faith in the possibility of better things. Faith in the cause or goal sought strengthens the perseverance necessary. Faith is contagious, it transmits itself to the followers and fellow-leaders. Faith gives confidence. 'Persons with these (faith and hope) always exercise ascendency even when inferior in every other characteristic.'[1]

Sympathy is one of the qualities not mentioned in the list quoted above, and which I find essential to the most effective leadership in the Indian village. In a situation where there is so much hunger, backwardness, disease and distress, absence of sympathy in the leader would mean a deficiency in his personality, and would mean, almost surely, that he was working for selfish reasons. For leadership anywhere, sympathy is important. We do not have to go through the same experience as others to have sympathy, but to have it involves personal insight. Range of sympathy is the measure of personality; sympathy is a requisite of social power, and only as a man understands the life around him does he have any effective existence. A person of character who comprehends our ways of thought is sure to have power with us. Presence or absence of mental health may always be expressed in terms of sympathy. The leader cannot really belong to a community without sympathy for it, for his sympathy represents as much of society as he truly belongs to.

Spirituality seems not to be included as an attribute by the psychologists, sociologists, philosophers and educationalists who have written on leadership, but I emphatically include it as an attribute for leading in India. The

[1] Cooley, *Human Nature and the Social Order*, chap. IX. See also Prof. Nafe's *Outline* quoted above; and Miller, op. cit., p. 594; also Bernard, *The Qualities of Leaders: Introduction to Social Psychology*, pp. 528 ff.

non-spiritual man can be but a foreigner to the Indian people. How innately religious the Indian people are is expressed by Dr Stanley Jones as he speaks of his Round Table Conferences: 'I must confess that I never approach these Round Tables without feeling my heart beat a little faster, for here before us sit members of the most religiously inclined race of the world, men who belong to a people who have persistently searched for God and reality as no other people on earth have searched; sons of a philosophical and cultural past that stretched back millenniums before Europe awoke from barbarity.'

The spiritual emphasis made by Mr Gandhi has an especially wide appeal, reaching Indians of all religions. In China I spoke with my former college classmate. Dr Hu Shi, who is now called the Father of the Chinese Educational Renaissance, concerning the possibility of Gandhi visiting China. He doubted whether a visit from the great Indian leader would do China any good. He would bring them more spirituality and religion, when their great need is the Western type of material efficiency, Dr Hu Shi said. Even the Far East recognizes Gandhi as a spiritual leader. India needs desperately to add efficiency, but she needs to retain her spirituality.

My experience with leaders bears this out. If one who could be a leader is careless in religious matters, this destroys the confidence that the Indian people would have in him. In fact the staunchest leaders, be they Hindu, Mohammedan or Christian, who are most effectual in influence for more efficient and higher ways of living and practice, are those who remain true to their innate, deeply spiritual natures. I notice this especially among the Hindus, some of whom are among our most efficient colleagues in the work described in former chapters. The most effectual of even those who have been educated abroad are those who have retained and brought back this deep spirituality. This volume is concerned much with the improvement of economic conditions, but even that field is spiritual in India, as it should be, for the spiritual

realm permeates all life. For leadership in this field in India spirituality is needed.

Employed Leaders

My Indian colleagues who serve in our Demonstration Centre and its extension service are called Rural Secretaries. They receive a nominal salary, near the maintenance level, all on the same rate-schedule, increasing moderately with years of service. Where it has been possible to establish these Centres, one or two secretaries are employed. These trained men are the executive staff of both the Centres and the extension activities. They work under the general supervision of a regional secretary for rural work like myself.

The Task of the extension service of the Rural Demonstration Centres is to contribute to consistent and continual increase

(*a*) In the efficiency and satisfaction of those who follow rural pursuits in the area ;

(*b*) In the welfare and satisfaction of home and community life of the people of the area ;

(c) In the appropriateness, efficiency and usefulness of the socio-economic organization of the area as a whole.

These are not separate functions, but are aspects of an integrated educative service.

It is in these activities that the rural secretaries have to lead—studying the conditions and needs in order to map out the most useful programme, seeing the programme carried through and finally checking and evaluating the results accomplished in order to improve it and better adapt it.

The leaders need proper training as described in the next chapter. But their superior preparation as compared with the villagers must not prevent their working hand in hand with the villagers. The most important part of their services is the multiplying of themselves through local honorary workers. With these the secretary must move

intimately. His success is largely to be judged by the success with which he is able to transfer leadership to the shoulders of others after he has assisted in the pioneering steps. This is the test of leadership. It is not the leadership of a captain or of emphasized superiority. It is the leadership of the teacher whose success is in making himself unnecessary, and free for new tasks.

Honorary, Unpaid Leaders

These leaders are 'those within the village group actually belonging to the group'. The work carried on in our over one hundred village associations, previously described is an outstanding example of unpaid service. In none of the associations in truly rural places is there any paid secretary or worker. But in each there is the honorary secretary, and secretaries of the branches and departments representing the divisions of the work. Each department —as religious, educational, physical, social and economic— has its committee men, and there are committees for special projects such as temperance and surveys. Those leaders in associations which are in Demonstration Centre areas work closely with the employed rural secretaries in the extension activities. It is upon them that the success of the work largely depends.

Some of the active workers and real leaders are boys. I do not find very different principles involved in leadership among boys. Boys in India invariably surpass the expectation of their elders when given a chance. So generally does the village leader. It is a striking fact how little the ordinary individual gets a chance to express himself in India. A member of almost any other race takes up so much room in comparison. A whole city population of Indians could be housed in a country town in England or America. This is but one evidence of the low degree of individualization among Indians. Yet the strongest desire of the human being is to be an individual, to attain individualization.[1] The Indian villager finds individualization

[1] See Hinkle, *The Re-Creating of the Individual*, p. 283.

when he finds a chance to serve others of his group. In leading in that service, unpaid, and hoping not for personal reward, he attains the highest and most important type of leadership.

The combination of employed and honorary workers is exceedingly effective. In the next chapter I show how these unpaid leaders originate—how they, working together, develop a group spirit, and what sacrifices they will make in order to become better fitted for their work. It would be impossible, I think, to express in words the interest they take in their service activities.

CHAPTER XIV

TACKLING THE PROBLEM OF LEADERSHIP—II

The Making of Employed Leaders

Most of our employed leaders for rural work recruit themselves. It is a problem of selection rather than recruitment. The rural secretaries are mostly young men who after successful experience in other forms of service have come to see the villages as a needy and neglected field. They come in far greater numbers than our present establishment can accommodate. This gives opportunity to select carefully. After selection the policy is to give the man the best possible training. He may have at least one college degree already. This further training, designed to make him best fitted for effective dealing with rural problems and people, has to be within the range of the limited means and the limited time that the man can be spared from the work for which he has been selected.

Supposing the money and time were available, should we first send the new rural secretary to Europe or America for highly technical training in agriculture, rural economy, rural sociology, and rural education? Emphatically, No!

Outstanding are the cases of splendid young men who were each the hope of an Indian country-side—of a whole area of villages. The plan was that the young man was to go away, get the best possible preparation, come back with the best educational equipment the world could give him, then live in a village and impart leadership which would be of untold value to all that rural area. The young man had this single purpose equally with his village friends.

But where is one who has come back to live and serve in the Indian village? I can point out to you where some of them sit today in very high and honourable places—in the big cities. The Indian rural boys, like the western country boys, later take their share, or more, of coveted places in the cities of their country. But the Indian village? Probably the young man should not be blamed for not making an attempt amid the conditions of his village after he had his training: high position and salary, a decent house, cultured friends, many advantages, all beckoned—in the city.

This is one of the problems of training rural leaders. Instead of sending the new recruit away to be trained for the villages, it would be better to send him as soon as possible back to the villages. Let it be hoped he is village bred. No one can ever understand the Indian village quite so well as he who grew up in a village and who has been away long enough, assisted by his education, to get a detached view of the village, its people, their conditions and problems.

Training Found Successful

Having carefully chosen a man who embodies as far as possible the attributes necessary to leadership, as discussed in the preceding chapter, our experience has shown the following to be a successful method of fitting him for his rural work. If possible he should have had an agricultural college training. Whether he has or not, the general course of procedure will be the same.

Learning by Doing. Locate the new worker at the Rural Demonstration Centre. Give him definite responsibilities in the scheme of division of labour at the Centre; but choose these responsibilities carefully, making sure that they are educative (not just routine and drudgery), that he will learn from bearing them. Responsibilities assigned should not be too many—they must leave plenty of time for reading and directed study along lines related to his practical work.

Besides this, and even more important, he is associated

as an apprentice with a seasoned secretary in the extension work in the villages. This is where he receives his most fundamental training.

Course of Study at Selected Institutions. In various parts of India there can be found a few outstanding examples of successful research, training, and practice in matters relating to those for which the new worker is training. After going through our own Practical Training School in Rural Reconstruction, the next step for his training—one which we have found very successful—is to send him for a certain number of weeks to each of a number of these institutions, careful arrangements being made with the authorities concerned. Eight months is the longest period that we have been able to give for this part of the training. Time spent at the various institutes varies according to the amount to be learned at each. Such a course has proved very practical and satisfactory in results.

After the secretary or worker returns to his Centre, he is given responsibility for a definite part of the work. He is given help and direction concerning his further reading. Certain items of research and village survey work can well come into his early activities.

When the secretary has worked some years in the rural field, it may become possible financially, and then seem wise, to give him training abroad. The vision he can get through seeing some things better done and more advanced than can be seen in India will be a great help to him now. The satisfaction of the results he has seen in his village service, the joys of the association he knows with the village people, will have removed the danger of his not returning to the village.

The Martandam Practical Training School in Rural Reconstruction

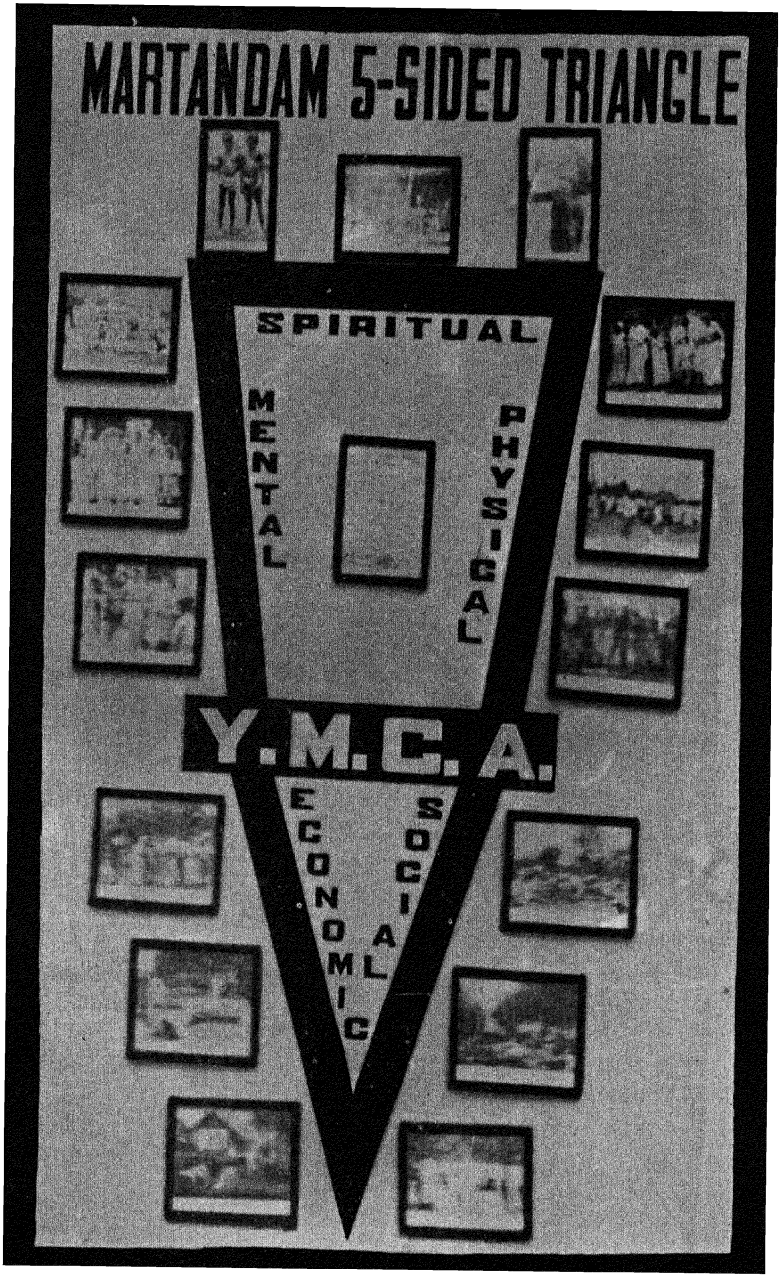
In the preface to this story of our experience, I predict that many of the methods we have found and will find successful will be useful to others in various parts of India.

Our conviction has been that if a thorough enough piece of comprehensive uplift work is done anywhere in India, it matters not so much where, its influence and helpfulness will spread far. We have been very desirous however to talk little and keep our light almost hid under a bushel until there was thoroughness of practice and proved results.

Now requests come in almost alarmingly increasing numbers from individuals, government agencies, mission, educational and service organizations, wishing to send men and women to us to be trained in rural reconstruction. The recommendations of Dr Kenyon L. Butterfield, after his study in India of the possibilities for such training, somewhat accentuated this demand upon us. Dr Butterfield recommended Martandam as a training Centre on the grounds, we are told, of its comprehensive programme, its actual work in many villages and its aim to lift the whole community by self-help. Feeling that giving training in methods for the reconstruction of rural India is one of the most important services anyone could give, we could not be sorry that this call to be an all-India training centre for rural workers had come to us, though we were greatly humbled by its responsibilities.

Apprentices we have with us most of the year, and we have a definite training course for them to follow; but with our small staff we could not do justice to all these students coming at stray times, so we invited as many as possible of them to come during a definite six weeks in March and April. Then our regular staff and other instructors secured for the period gave all their energies to this practical intensive training.

The spectacle of some 125 students, staff and old boys of the Martandam Practical Training School in Rural Reconstruction and the Summer School assembled for the final exercises of the 1931 session was a happy and impressive one. Nearly seventy students had just received their certificates signifying that they had completed the courses and passed the examinations. Some forty old boys,



THE MARTANDAM FIVE-SIDED TRIANGLE

students of former annual schools, had come back as guests of honour for the final exercises and the Old Boys' Luncheon, in which all joined. It has since been an annual event.

Science and Business. The desire to do rural reconstruction is sweeping over India like a great regenerating fire. But when we enter this field of rural reconstruction we enter a field of deep and exacting practical science; and to educate the hungry rural masses to feed themselves, we also have to enter the field of business. Science and business are the two fields for which most of those who desire to do rural reconstruction in India are least fitted. There is so much need, in the language of the Lindsay Commission, of 'putting the scientific mind behind the merciful heart'. Training—thorough, practical training, and a great deal of it,—is absolutely essential. There are so many pitiful examples of the blind trying to lead those only slightly more blind with stumbling results.

The Martandam Practical Training School in Rural Reconstruction is built on a foundation of Summer Schools, held annually since 1926. These summer schools have given intensive training to from 25 to 75 students each year, the majority—honorary rural workers who do so much in their spare time to improve their villages and who wished to become more efficient in the comprehensive programmes they were trying to further. These schools were short; but it was surprising how much ground could be covered by an intensive programme of teaching and study on a limited number of subjects with the day's work starting at 5-30 in the morning and lasting till 9-30 at night. The students worked harder than they ever could in a long course; and the encouraging thing has been that they actually went out and put into practice what they learned during these weeks. The training period is now lengthened to two four-months courses in a year, with opportunity for advanced study.

Programmes in Action Essential. It is impractical to give training in rural reconstruction anywhere away from

a rural reconstruction programme in action. We try to give our students in this new venture the advantage of the twenty years' work and experimenting in rural reconstruction in India which our Association has pioneered and developed, together with that of the considerable study we have made in this and other countries to select the best known methods which can be adapted to need and conditions in India. The teaching is done from our three Centres at Martandam, Paranium, and Oollannore, which are Centres of many villages in which active and intensive work is being carried on. The students go out to these other villages actually to see and to help with what is being done. The field method, though somewhat unique in India, has the best educational wisdom behind it.

The work at Martandam, Paranium and Oollannore is comprehensive, helping to benefit all members of rural families, male and female, young and old, of different castes and religions, in all phases of their life—physical, mental, spiritual, social and economic. There is not much use in training students in one or two lines of improvement when the villager has to be helped on all sides of his life. The self-help basis is the only worthwhile basis for any part of India.

There is the emphasis on co-operative marketing and the chance really to take part in doing it. Students want especially to learn this, owing to the fact that most co-operation in India stops short of marketing. The Martandam area being one of excessive poverty, here they can see whether the methods (and just what methods) are bringing real benefits of fuller and happier life to some of the poorest of this world's people. They have a chance to study and help with our summer schools for local leaders. Coming to know this large number of honorary workers who come in to study, they actually learn how to run local summer schools or training classes which will be necessary in every field to which they go back to work.

Making the School Practical. We teach about no subject with which we do not practise in the comprehensive

programme at the Centre and in the extension field. The curriculum includes the following subjects as they are dealt with in our work:

Poverty and its Elimination
Village Surveys
Quickening of the Religious Life of the Village
Methods of Physical Education
Other forms of Adult Education
Instruction in the Market Places
The Village Library and the Circulating Library system
Games and Sports
Night Schools for the Young and Adults
Village Organization for Effective Service (such as the village YMCAs)
Socialization—working for and with the whole community: all castes, and creeds and conditions
Temperance Education
Information Service—public speaking, writing, advertising
Boys' Work
Women's and Girls' Work
The Demonstration Method
Village Sanitation and Health (includes the bore-hole Latrine)
Co-operative Credit
Co-operative Production (improving quality)
Co-operative Marketing of improved local products
Cottage Industries
Poultry Keeping
The use of Charts, Pictures, etc.

Bee-keeping
Weaving
Gardening (use of better seeds, varieties and methods)
Improvement of Cattle (including pasturage and fodder crops)
Goats (the poor man's cow)
Exhibitions (showing results centrally and in the individual villages. The students help to conduct the annual Central Exhibition)
The Drama—its uses in the village
The Rural Centre
The Extension Department
Co-operating with Government and other agencies
Rural Leadership

Now, after the experience of the school, we are more than ever convinced that the field training—that is, having the students go into the villages and actually help the honorary workers in their villages with the programmes of rural uplift they are carrying on, combined with a right percentage of class work with analysis of what they have seen and done in the villages—is the best type of training. Everyday, also, the students have practical work at the Centre.

In the very first days of the school we start with the surveys dividing the school into groups to make surveys regarding different conditions in different villages. Our students this year made surveys regarding the state of poultry, cattle, goats, bees and bee-keeping, intemperance, health and sanitation, as a basis for improvements to be carried out in regard to these subjects. They later took part in two village exhibitions and finally in the central exhibition, which amount to 'the showing of results' of the reconstruction programme.

Perpetual Thirst for Knowledge. The most enjoyable feature of these schools, to us of the staff, was the students themselves. Those organizations which had sent men had picked such ones as they thought would be competent enough to bring back what they learned from this study, and to put features of it into operation in their respective fields. This meant a body of able, energetic, fine-spirited men with a foundation for what they were to learn. Their eagerness to know all about everything was remarkable. It was difficult to bring any session to a close because there were always more questions. Some members of the staff were surprised that even at the end of these intensive weeks of very hard work this eagerness for knowledge had not at all abated. The same characteristics are true of the students of the schools of later years, who have come from even a wider area of India, Burma and Ceylon.

We do not have a large staff and do not invite anyone to teach who is not actually, either locally or elsewhere, working at the subject which he is to teach. The regular

staffs of our Martandam, Paranium and Oollannore Rural Centres and Extension area do most of the teaching, avoiding calling in persons, however competent, for stray lectures. Those who do come from outside are so carefully chosen and so competent that they are deeply appreciated by the students. One of the most popular of these is Danish; and he tells the students that a school like this is more like the Folk High Schools of Denmark than any other form of instruction now given in India.

CHAPTER XV

TACKLING THE PROBLEM OF LEADERSHIP—III

The Making of Honorary Leaders

These unpaid, spare-time leaders are fundamentally important ones. 'We need,' says Butterfield,[1] 'a host of men and women who have caught a vision of the rural field, who are willing to dedicate their lives to its service, and who can receive a training adequate to the task so that efficiency shall be linked with high purpose.' I am asked, 'How is it that in the Travancore and Cochin villages you approach having this host of leaders? How comes such success in recruitment?' In many places and in different countries there is a dearth of those willing to lead. The answer is simple—*Service is the basis for leadership.*

Leaders are not born leaders. Neither do many true leaders set out to be leaders. Leaders are not made in schools for leadership; and such schools are on the wrong track if they propose to train men so that they will be general experts in leading in anything and everything instead of showing themselves efficient in some productive occupation. Schools of leadership can only be justified when they train for efficiency in meeting a specific situation and need.

The best leaders arise in two ways:

1. *They are chosen by their own group,* because the group sees in them fitness to lead.
2. *They create the group* unintentionally, and

[1] *Principles and Methods of Christian Work in Rural Areas,* p. 19.

probably without any thought of being leaders. A man may, for instance, become a leader by practising a subsidiary vocation so successfully that his neighbours follow his example and try to do like him. This is the 'static leader'.

The situation often creates the leader. Our village leaders are created by the great needs, and by the inculcation of the spirit of service to answer the various aspects of those needs.

Most of them were persons of very few advantages and of ordinary ability; they lacked self-assertiveness and self-confidence and experience in leading. But they thought of their village as a poor and poverty-stricken place. They saw distress all about. They knew things could be better. They had visited another village which had a local association, or a co-operative society, a village which was helping itself with cottage vocations. They wanted the same for their village. Furthermore, in their area, the village associations, the rural demonstration extension and certain church and other religious influences had taught them the *ideal of service*. At first such young men have little or no thought of becoming leaders but they talk and discuss and study much about 'How can we serve our village?' Then addressing themselves to such service, effective leaders arise. They are made out of quite ordinary village young men and boys.

And so we have an attitude which communities in other countries, not 'primitive' and 'backward' (as they would call us) need. Without it our village self-help improvement could not proceed. This attitude is a strong desire on the part of many individuals to do whatever they can to better their village and its people.

So the problem in connexion with honorary leaders is not recruiting, for there are many; not selection, for we need all, and their own groups will do the selecting for the various services; it is training to make into more effective leaders willing but unskilled men and boys, and girls and women too, who come forward to serve.

The Training of Honorary Leaders

We have developed seven principal methods in the training of the honorary village workers who in such splendid numbers come forward wanting to help in their spare time: Learning by Doing, Camps, Conferences, Week-end Study Groups, Special Courses, Specialized Schools and Summer Schools.

Learning by Doing. The most effective way for workers to learn is to go ahead and practise, with the expert counsel and companionship in the work of the rural secretary or other full-time worker. Growth in efficiency through this method is easily seen. We see men taking up and practising cottage vocations so successfully and profitably at their own homes that others copy and they become static leaders. A day-school teacher organizes and teaches a night-school for working men and adult boys. The village may be distressed over the harm that drink is doing locally. One person is selected as chairman of a temperance committee and others join with him as working members of the committee to make a survey study, to know how much harm drink really is doing, and then to educate the people against drinking. This may lead to Government removing the drink shops from the village.[1] In the committee-service the chairman and members grow in ability to study and handle problems.

Camps. These are mostly used with boys of high school or college age. Some of those in such a camp, however, may be leaders experienced in boys' work. As counsellors in camp they have more time actually with the boys during a camp of seven to ten days than a teacher has in many weeks. These camps include, along with a

[1] The Travancore Government has for a number of years proclaimed that whenever a majority in any village should ask that a liquor shop be removed from its midst, the Government would either abolish it or move it to a greater distance. This has given opportunity and incentive for local leaders and workers to test this promise by carrying on educational temperance efforts, which form public opinion. It also lessens drinking even when the shops cannot be removed.

good time, a carefully-planned programme of instruction and discussion. Effort is made to arrange camps in places where environs will add to the instruction. This is illustrated by our Boys' Camp at Vazhoor held on the estate of a retired High Court Judge and progressive agriculturist. Among the industries of the estate are the production of rubber, tapioca, sugar, coconut products, rice, nutmegs, cardamoms, pepper, honey, mangoes, sweet potatoes, coffee, tea, lemons, timber and dairy products. The boys had an opportunity to study all these processes. In the centre of the estate is a forest full of interest for boys. Flowing through it is a clear river, ideal for bathing and swimming. In our boys' camps responsibility is placed upon the boys. They plan the programmes and carry them out, thus in a few days getting much real training in leadership.

As many as possible of our village honorary leaders and workers are scouts; and we help to organize and teach scouting in the villages. Boy scout camps include many educational features, as do girl guide camps held for leaders among the girls.

Conferences. Conferences are useful if rightly planned and conducted. The Indian people are fond of conferences. They may be an aid both to knowledge and socialization. But the usual type of programme for conferences in our area has been too much made up of lectures. We have supplemented lectures in our conferences by the discussion method described in an earlier chapter. The first and general reaction to this was expressed by a member of a discussion group when, at the close, the leader of the discussion asked him what he thought of the session. He said, 'I don't think it amounted to much. You didn't tell us anything. You just made us think.' But the old custom of and liking for passively sitting and absorbing what another has worked to prepare and deliver is now giving way to the more educative if less spectacular way of putting minds together under expert guidance, for the working out of common problems.

Week-end Study Groups. One of the new training institutions which has resulted from the socio-economic activities of the Demonstration Centre and extension is the two-day so-called 'Week-end Study Groups'. Many of the village leaders are teachers and many are senior students; they can give all of Saturday and Sunday to such study and are very eager to do so. As often as possible such occasions are arranged. The leaders will walk in from the villages to begin the programme very early on Saturday morning. Many Westerners, thinking of the Orient as sleepy and languid, do not realize that the Oriental is an early riser and that he spends many weary hours, the best hours of the day, waiting for the Westerner to wake and get himself ready for business. Rising long before the sun, the Oriental has his private or family devotions and is ready for the day.

This means that we can put in two long days, make the programme intensive, and really learn a great deal, in week-end sessions. A series of every week-end lessons, extending over two and one-half months makes a valuable course. This training arises out of the honorary service these men are doing. They feel the need for getting together with other leaders to discuss common problems and difficulties; and they ask that such coming together be arranged. The programme then is of a practical nature; little entertainment is needed. There can be two full days of real study. Several villages—perhaps a dozen —will be represented by as many delegates as can manage to come. Those arranging for the group plan a tentative programme which will be modified by the expressed interests of the group when assembled.

The discussion method is used. The first question may be, 'What is proving to be the greatest difficulty or hindrance to the success of the various projects we are furthering in our villages? Discussion may bring out the feeling of the group that it is community cleavages and the difficulty of getting members of the various caste groups all to enter into and work together on these reforms. It

may be decided to give several hour-periods to the subject of 'How to bring the whole community to act as one for the common good'. This, then, will take a prominent place in the two days' programme, along with other subjects previously decided upon. On Sunday there is opportunity for worship. The two days' programme has been so shaped that the religious aspects and bearings of the subjects decided upon are considered on Sunday.

The week-end Study Groups have proved socially strengthening in emphasizing to leaders in one village that leaders in the other villages are working with them on similar problems—really on a great common problem of the whole rural area. They have proved valuable educationally and have increased the ability of the honorary leaders. They are a definite part of the all-important scheme of following up those men who have had instruction in our summer schools or other training sessions.

Special Courses. Courses of lessons are taken to the villages and taught wherever most convenient. For example my twelve lessons in bee-keeping are best taught to the bee-keepers right under their own bee trees.

Specialized Schools. We have found short schools specializing in a particular subject very successful where students cannot remain together more than a week. It is a mistake to take up several subjects in this short time. Such subjects as Playground Games and Drill, Health and Sanitation, Cottage Industries, Boys' Work—each may be the subject for such a specialized school.

Our Travancore and Cochin School for Workers with Boys held during the Christmas holidays brought together a group of twenty-five excellent men from various parts of these States. The invitation was limited to men especially interested in boys—actual workers with boys—so we got a group of picked men capable of profiting much in a short time from such instruction. It was remarkable how well we could handle the one subject in that time. The most up-to-date methods were taught, in which, the leader does not as of old do the work, but the boys discuss plans

and work their own programmes with the leader as an interested and participating advisor. The instruction dealt with the psychology of the group and of the boy. Here again groups of boys were used in demonstration of method. The patrols of the school went out among the bye-ways and hedges and brought in some of the most pitiable poor boys. In giving these boys some of the joys of Christmas, the students themselves learned something of what they could do with similar groups in their own villages. This specialized school was one of the most successful we have had.

Summer and Folk Schools. To one who believes in the value of systematic study, all of the above features, while very valuable, seemed thoroughly inadequate for the training of our village honorary leaders working in the face of huge and baffling problems.

Early in 1926 we began making preparation for a new experiment. Choosing April, one of the hottest and driest months of the year—when the schools would be closed and teachers and students could attend—we planned a Summer School which would give instruction for about two weeks to village leaders of the nearly one hundred associations in Travancore and Cochin and any others who wished to attend.

The town of Quilon, centrally situated for those who would come by boat, bus or train from north or south, was chosen. The school was held in loaned quarters. Evening sessions were held out-of-doors on the seashore where the heat was less intense. The school was put on a self-supporting basis and each student had to pay for his food and the cost of travel. This made attendance difficult for honorary secretaries and leaders of the villages, and, of course, prevented some from attending. Others were prevented by not knowing the language of the school. But about forty young men made whatever sacrifice was necessary.

Nine instructors were secured from various parts of India. The courses given were: Association History and

Methods of Religious Work; Modern Indian Biographies; Educational Methods (including the drama, pictures, charts, lantern slides, and surveys); the Co-operative Method; Mechanics and Methods of YMCA Work; Bee-keeping; Poultry Husbandry; Physical Education (including health); Social Service; Citizenship; Christian Ethics.

The practice part of the course in Physical Education was given on the play courts or on the beach between the afternoon and the evening sessions. A village variety entertainment was performed by the students of the school on the last night. The students had a good time at this school and the atmosphere of industriousness was very gratifying. The school programme was more intense than students could have carried out for a longer period. The programme began in the morning at 5-45 and carried on until 8-15 at night. Attendance at all sessions and passing the examination were made requirements for the certificate given at the end of the course. There is no doubt that these students accomplished as much in two weeks as students ordinarily do in two months.

There was the language difficulty. In India, 222 languages are reported by the census. In Travancore and Cochin we have two main vernacular languages, Malayalam and Tamil. It was decided that for a general school of the two States, English would be the best-known single language. For a short school the use of more than one language and interpretation would take too much time. When this was announced, most appealing letters came in from those who knew one of the vernaculars only, requesting that we put in at least some vernacular courses. These requests had to be refused with the promise that schools in the vernaculars would be held later. So eager were the applicants that some came anyway, even if they did not know the language. They sat in the school, joined in the games and picked up what they could.

Just a year later, we held a similar school at Martandam, in South Travancore, using mainly the prevailing language of the area, Tamil. About sixty young village leaders took

the courses. In addition to the courses covered at the Quilon School as given above, there were courses in Music for the Village, Rural Sanitation, Boys' Work and Scouting, Spinning and Weaving. Every student learned to prepare the cotton and to spin.

How financially poor are many of the honorary leaders who do such splendid unpaid service in the villages can be well illustrated by the fact that even though the price of food was kept down to 8 annas a day (8 pence, 16 cents) some of the students simply could not pay it. They went without food all day and walked back to their villages as much as five miles away, at night after the night session, to partake of the scanty family meal. This meant ten miles of walking each day.

The English and Tamil Schools left the demand of the Malayalee leaders still unsatisfied. So the following year a school was conducted with Malayalam as the medium of instruction. It was held in Central Travancore in the heart of the Malayalam language area.

Bearing out how truly rural this work is and how closely it is related to farming operations, the one drawback about the Malayalam school was the attendance. Twenty-five of the men who had written to say that they would be present were detained from coming. This was due chiefly to the fact that showers which usually come early in May came this year about the middle of April. This meant that certain ploughing and planting had to be taken in hand immediately or the year's crop would be lost; and consequently many of the farmers from the villages who were to have been with us were prevented from coming. In 1929 about eighty village leaders attended our Tamil school at Martandam and in 1930 we held the school in the centre of the Malayalam area at Tiruvalla.

Experience has taught us that the language difficulty is not so great. Translation, if it takes longer, gives more time to think. So since Rural Reconstruction in all its comprehensiveness has become the dominant interest of the learners it was decided to hold all future summer

schools at Martandam where we have the programme in action to study. The 1931 school was merged into the last two weeks of the newer Practical Training School in Rural Reconstruction.

This 1931 school of eighty to ninety students and staff was a bit unwieldy, especially when every attempt was made to make it a practical demonstration school. The patrol system did not work so well, and after the smooth running of the school with the smaller groups of students, we were not so happy about the order of things. We then limited the numbers, and the quota of fifty set for 1932 was nearly filled by applications received before any announcement of that year's school was sent out. The students of the longer training course finish and go away after the big central exhibition and after being a few days with the summer school students.

The larger 1931 school was, however, an impressive and inspiring one partly because of the large numbers of splendidly keen students. We had arranged for one physical director from the staff of the National College of Physical Education at Madras. He saw at once that, while he could lead this school in the morning setting up drill exercises, he could not handle such a large group in the teaching of playground games between the classes and in the evening games hour. We were then fortunate in being able to arrange for a total of three physical directors, adding those from the College of Arts and the College of Science in Trivandrum.

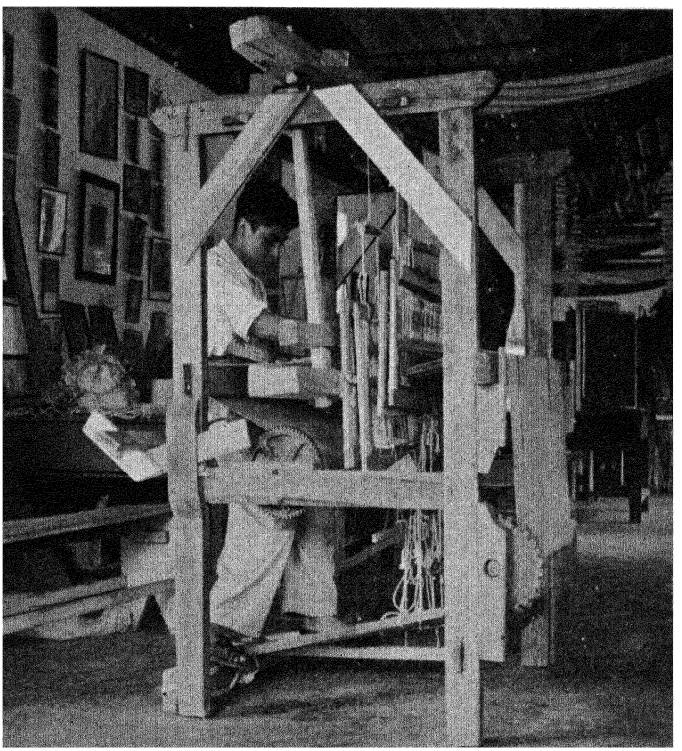
As an educational feature it is arranged to have the Annual Rural Service Exhibition held at the Centre during the School. The students, therefore, not only have a chance to see what can be done in these features of rural reconstruction, but they are assigned according to a very definite and exacting questionnaire to study the exhibition in all its departments, and to duties in connexion with setting up and carrying on the exhibition. As it is such a large body, we cannot move it to different villages as readily as we do the smaller group of the Training School,

but we do take this class out to show them the villagers at work and play in such activities as transferring bees to modern hives, extracting honey, keeping poultry, instituting bore-hole latrines to improve village sanitation and health, leading the children in character-building games, and enacting rural dramas written and produced entirely in the village.

As I write there comes the latest evidence of the love these unpaid workers have for their work. The honorary secretary of Paranium Village Association, sixteen miles away, comes to try to collect more money for the little association's 'lighthouse' building they are working on so hard to be able to house their library and be the headquarters of their service. He is just up from small-pox. He gets only Rs 15 ($5, £1) a month as a village teacher, yet he has given Rs 100—more than half a year's salary—as his contribution towards the building; and it was on one of his many trips into Trivandrum in its interest that he contracted small-pox during the epidemic there. He was the first case in the village, and his young wife caught it from him. He has come out as soon as he is able (I think too soon), and at once is away down here in the interest of his honorary service. I marvel at the keenness and the actual love these unpaid leaders have for their work. I can hardly understand it. The true work of the professional, full-time leader is in reality very largely the training of such lay brothers who, without pay, are so keen to do what they can.

If the test of the employed leader is how soon he will make himself unnecessary, how soon, then, will his 'expert counsel' train enough lay leaders to do within the group what is needed? The honorary village leader is the first to answer 'Never!'. And probably it is true that any local group, no matter how far developed, can be benefited by some 'expert counsel' and expert information coming from outside. This is the law of co-operation.

'The villager,' says Sir Malcolm Hailey, 'has the keen



MEXICAN YOUTH LEARNS TO WEAVE

instincts of a man who lives very close to nature; he will not be persuaded by those whom he has not learnt to trust, charm they never so wisely, and he will not trust those who do not seem prepared to put aside all other claims and considerations, in order to live with him, to learn his troubles, and to support him through them.' This is true; and the villager longs for the strengthening of just that kind of companion whom he can trust, who will study his problems with him, whatever sacrifice it may require, and be a brother toiler with him up from poverty of so many kinds.

CHAPTER XVI

IT CAN BE DONE

THAT was five years ago when the spirit of service and love for the work almost literally drove Dason, an honorary, unpaid secretary of the Paraniyam YMCA from his small-pox bed to raise money for the new building.

Dason is a modest, unassuming young man who speaks very little English. He and his wife are able to live and demonstrate there in this isolated village, the teachings of the Master Teacher. He is a quiet sort—very little talk or preaching is necessary for those who demonstrate by living and doing—but he is possessed of a dogged determination which nothing can move. And he is a leader. I should say he is a leader of leaders, for Paraniyam has more than its share of capable young men who give their time to the welfare of their little village. Many of them have taken training at Martandam and all of them at odd times visit the centre to learn from what goes on there. With Dason as their chief, they divide the work of the YMCA between them. They decide what needs to be done and then set about to do it. Once they start, they are irrepressible.

Their YMCA building is a case in point. I advised them to put up a small building which would cost about Rs 500. Not a bit of it. They politely looked through me—and changed the subject. Not long afterward we attended the opening of the Paraniyam YMCA, a well-planned, good-sized building which cost Rs 1,500 and was all paid for except Rs 75. Incredible, but true.

They began to talk of having a Paraniyam YMCA Rural Reconstruction Centre. I took a deep breath.

'Think,' I said, 'of all the cost of such a centre. Think how much money it will take to make poultry yards, and stables, to get all the fowls and cattle you will need, and then of all it will cost to feed them. And who can give all his time to taking care of them ? Instead of trying to have all the activities of a comprehensive programme, you had better have a few reconstruction projects.'

I might have saved my breath. They wanted a Rural Reconstruction Centre and that meant they would have one. They had no money, no material possessions to help, but they wanted a centre because such a centre would mean help to them and their poor neighbours. After three years persistence Paraniyam had a full-fledged centre which is the envy of all the villages and one of the most inspiring, I could even say thrilling, places I know.

How they have done this I hardly know. The fact is, they have. Every time I visit them I see some new development under way. I bear in mind that they are building on Martandam's tried methods and have not had to go through the expensive experimentation stages; that we give them a great deal of help and advice. I bear in mind their wealth of somewhat educated unemployed young men who need these industries to help them live: the honorary secretary for bee-keeping not only helps the bee-keepers of the area but keeps bees himself; the honorary secretary for poultry- and turkey-keeping does the same. The village is a member of the Martandam cock circuit, and their breeding bull and goat belong to the Martandam breeding circuit. An interested friend gave them a packet of tomato seeds and a new industry sprang up with the plants; wherever they are placed in the State, Paraniyam tomatoes sell at once. Another friend gave them a couple of looms; a weaving factory literally hums with activity.

All this takes money and Paraniyam has none. Perhaps such work does not take as much money as we are prone to think. Certainly Paraniyam uses a minimum. They

have developed their marketing wisely. Simultaneously with the improvement of poultry they began to market eggs. They find their customers, with and without our help, and have marketed up to 4,488 large-sized eggs a month, guaranteed on the Martandam method. Honey properly bottled and labelled with their own label, towels of various sizes and cloth of different qualities, arrowroot flour, all sell well in the Trivandrum Sales Depot and in other places.

Actual cash is very scarce in Paraniyam and yet there is a local market. Poultry-keepers who bring in eggs take part payment in cloth woven in the weaving factory, and the weavers eat some eggs. As a result of this barter system the villagers are gradually becoming better dressed and better fed. Just now they have appointed their own honorary marketing secretary who will earn his expenses from the increased sales: the experiment has yet to be proved, but it marks a development in the right direction.

Their projects succeed because there is never any half-way business about them. It has always been our policy to deal only with a superior quality of products. One day Paraniyam got a big standing order from a bakery which wanted fresh, cheap, eggs but cared little for size. They decided as a special case to sell ordinary size country eggs to this bakery and accepted the order. After a search in their area they had to write, 'We are sorry but small eggs are not to be found here now, as we have all improved our poultry and they lay bigger eggs.'

Paraniyam is thrifty. One day when I took our National General Secretary to visit them, he was impressed with their need of a marketing fund for their so-called weaving factory and offered to loan them a hundred rupees without interest. Where in the world would anyone find it difficult to give a loan without interest? Paraniyam. They talked the matter over together and then said, 'Thank you, but we will not take the loan. We have learned from the co-operative society how difficult it is to pay back loans. We might not be able to pay on time.' They have kept on with their weaving factory of six looms and twelve weavers,

villagers who were formerly unemployed. They sent one man to the Government school to learn the best technique. The equipment was too expensive for them to buy, so they have built their own. Bleaching and dyeing are now done in the factory. Yarn is supplied to weavers who have looms at home. All the product is sold through the Centre. Why should we smile when they call a tiny thatched shed a factory ? To a growing number of people, it means food and health.

The Rural Centre at Paraniyam is not all work. In spite of their poverty and needs, they live a reasonably balanced life. A number of the leaders are teachers who teach in the vernacular school across the road or in nearby schools. These teachers conduct night schools for adults and children. The YMCA building houses a library where a thousand books circulate so constantly they have to be bound and re-bound ; a well attended reading room ; head-quarters for the village co-operative society ; a meeting-place for literary meetings and religious study-groups. The two playgrounds, one for young men and one for boys, are full practically every evening. The winner of the hop-step-and-jump item in the State Meet was a Paraniyam boy. One as yet unsatisfied desire is to own their own play-grounds as land is easy to buy but difficult to rent.

Dr Kumaran Nair, in charge of the Neyyattinkara Government Health Unit has opened a clinic just across from the Centre. 'I have opened this clinic here,' said Dr Nair, 'because I can get the same splendid co-operation from local leaders that you get. Without such co-operation Government work cannot succeed.'

On Sundays twenty-five young men go out to teach Sunday School classes in eleven villages around—villages to which no other teachers go.

What Paraniyam has done, any village can do. Parani-yam started with almost nothing ; very little has been given to them. They have accomplished much because of two invaluable assets—an ideal of service and a love for their work.

CHAPTER XVII

BUILDING PILLARS OF POLICY

No chapter in the story of the climb to happier living in rural India will be more interesting than this which tells of the gradual, day-by-day finding out and building up of the best ways to make progress. This is the story of a real struggle. I have been criticized that in speaking and writing my enthusiasm makes development of the Indian village sound too easy. It is not easy; struggle is the right word for it. Through this struggle we arrive, one by one, as tried methods and principles so definitely that we can state them and use them. Such arrival is immensely satisfying after the uncertain stages.

The Purpose of Rural Reconstruction. For the findings of the World's Rural Conference which included leaders from different nations who recently visited, in peripatetic fashion, the villages of our Martandam Extension Area, we contributed this concise statement of the purpose of Rural Reconstruction. 'The purpose of Rural Reconstruction under our Association is to bring about a complete upward development towards a more abundant life for rural people —spiritual, mental, physical, social and economic.'

In another World's Conference, an Indian leader made the statement: 'Rural Reconstruction is after all only tampering with the problem; we want a completely new order.' The speaker and others like him simply do not understand what I mean by, and what we practise as, Rural Reconstruction. They have never taken the time to study a comprehensive work like ours. They are thinking of those who, under the name of Rural Reconstruction, or

'uplift' (a word which I never use as people naturally do not quite like the idea of being uplifted by someone) have some poultry-keeping or bee-keeping or other cottage industry, a breeding bull, or who organize a few stray lectures. This is not Rural Reconstruction, however useful these few things be; and I agree that they constitute only tampering with the problem. My definition here describes a complete development—a wholly new and happier order.

The Spiritual Basis. Along with my constantly repeated statement: 'The spiritual side is the foundation for all we do on the other sides', it is necessary for me to make a further explanation so that all may know that I really mean it. I have written that, although spirituality seems not to be included as an attribute of leadership by the psychologists, sociologists, philosophers, and educationists, I emphatically include it as an attribute for leading in India. Likewise I doubt whether programmes not including or not based on things spiritual are fundamental enough to be deep-reaching, or capable of results lasting enough to be worth the doing. I certainly would not spend my years out here in simple social service just doing some good things without the spiritual basis because I believe that only as man realizes his place and work in God's created world, is he the power he can be. I am not in agreement with those who say that because they are working in a Hindu or a Mohammedan State or country they must say nothing about Christianity nor put forward the fact that they are endeavouring to exemplify and demonstrate the abundant way of life taught by Christ Jesus. I think men deceive themselves when they believe that non-Christians will appreciate them more if they pretend to have no interest in their own religion. What will members of the most spiritually-minded race in the world think of a representative of the Young Men's Christian Association, for instance, if he never appears to care anything for or about his religion? Will they not consider him either a spiritual weakling or a mild deceiver, probably not quite straightforward?

No, we have repeated evidence that even one like myself who so emphasizes socialization—working with all—is not required to hide his religion. A man is weak who is ashamed of his religious beliefs. I urge every one of my Hindu colleagues to live daily the very best he finds in Hinduism. I ask my Mohammedan fellow-workers to do the same; and when I am among Budhists, as in Ceylon, I tell them, 'Live and practise the best you find in Buddhism.' And I, because I am a Christian, working along with these friends, will increasingly try to exemplify Christ's teachings better and better through daily growth. I am happy when non-Christian friends have been motivated by the life and teachings of Christ Jesus, revealed to them through exemplification while participating in service with the people of their own villages, as I am happy when the motivation comes from a deeper understanding and study of their own religions. If it happens that some find in my life and practice and teaching, and in the lives of my Christian colleagues, something useful to them as they work out their lives, I shall be glad. And if this sometimes, as at Paraniyam, leads some to become followers of Christ Jesus, no one can object, for I believe religion cannot be given, it can only be taken. Whatever makes a man a better, stronger citizen of his country, and enables him to live in greater accord and understanding with his brother, is worthy. I urge all men to study their religions and grow in them or seek wherever they will. I believe in God and His teachings as given to us by Christ Jesus, and that the spiritual basis of life is the only foundation on which greatness rests; that only as men find their places in the world as ordered by God is their work everlasting.

I am sometimes asked if our programme of exemplification, a maximum of living and doing with a minimum of verbal preaching, ever makes any follow Christ Jesus. The answer is: 'It does.' About a mile from Paraniyam we can show you where one Sunday School grew into a church with a membership of thirty families, who are just now finishing their small church building. If exemplification

of how Jesus, moved with true compassion, healed and cheered and comforted and fed and helped and guided people upwards from all their troubles, makes Christians, our non-Christian friends will not object. They object to other methods; they do not object to teaching people a *really* better, happier, and more abundant life. They are not against the reformation of individuals or against the spread of the spirit of Christ. Our Brahmin and other Hindu students in the Rural Reconstruction Training School, many of them Government teachers, are most attentive in our morning prayers. Some of them take notes during prayers, as they do for other subjects, wishing to preserve the messages. I believe they would be the first to vote against starting the day without this brief, quiet, communion, all of us together with God.

His Highness the Gaekwar of Baroda wished me to conduct a training class, similar to ours at Martandam, at the Baroda State Rural Centre which we helped to start, and which we still staff and advise. His Highness saw to it that the best young officers were picked from five departments of Government to go with me into the villages and study with the people how they in those departments could work together, not separately as is customary, for the reconstruction of the villages. They were all non-Christians. One or two had returned from study abroad. It was an intensive course and we could not rest on Sundays. Welcoming this opportunity to try what some had claimed could not be done in an area where there were few Christians, I took for the Sunday programme the same subject I often do in areas mostly Christian: 'How can we quicken the spiritual life of these villages?' I have never found a group who discussed the subject more reverently, or more earnestly seeking truth. They all expressed their appreciation of the fact that without a sound spiritual basis all these other helps we were learning would not successfully regenerate the villages. They said the present forms of Hinduism and Mohammedanism in these villages were not providing a sufficient spiritual foundation

and they considered how to find such a foundation from the teachings of those religions. They wanted also to consider the teachings of Christianity as a possible basis. This is just another example of how unnecessary it is to stifle the spiritual side of Rural Reconstruction in India.

One can fully co-operate with another only on a spiritual basis—all other forms of co-operation are merely surface matters. I can work with a spiritually-minded man of another faith better than with one who has let his spiritual light grow dim. There is strong backing from Indian thinkers for this basis. These words from Sir S. Radhakrishnan typify their thought:

'The unity of the modern world demands a new cultural basis; and the real issue is whether it is to be guided by the economic and the pragmatistic mind, which is the more dominant at the moment, or by the spiritual. A mechanical world in which humanity is welded into a machine of soulless efficiency is not the proper goal for human endeavour. We need a spiritual outlook which will include in its intention not only the vast surging life of economics and politics but the profound needs of the soul. The real character of a civilization is to be gathered not so much from its forms and institutions as from the values of the spirit, the furniture of the mind. Religion is the inside of a civilization, the soul, as it were, of the body of its social organization. Scientific applications, economic alliances, political institutions may bring the world together outwardly; but for a strong and stable unity the invisible but deeper bonds of ideas and ideals require to be strengthened. In the work of rebuilding the human household, the role of religion is no less important than that of science.'

Socialization. Because socialization is one of the outstanding needs of India, we continue to put emphasis on bringing all the people of the villages to unite in the rural reconstruction programme. Because we represent no particular denomination, we can approach all people without suspicion. We therefore have a special opportunity

which becomes a special responsibility. Socialization means a programme, *of all the people, by all the people, for all the people*, everyone in the programme, everyone helping with it, and everyone being benefited by it, poorest to richest, all castes and creeds, old and young, men and women, boys and girls : no project for or by any one class of people. Such a programme is not easy but it is absolutely possible, if enough energy and tact is put into it to see it through.

Many philanthropists do not want socialization. Many groups of social and religious workers consciously or unconsciously do not want socialization ; they are too well satisfied with having the benefits of their work or association for themselves. This narrowness of interest and vision is responsible for internal splits and dissensions, so destructive and so disgraceful. Many sincere individual workers do not want socialization enough to accomplish it. When it is attained then and then only can the Indian village become able. Divided as the villagers are, they can do no more than poor, individual families can do ; they cannot dig a good well ; they certainly cannot build a road : together they can accomplish all that expert counsel can bring into their vision.

Socialization is the greatest power toward the eradication of inequalities. Well ordered communities cannot exist where there are too great inequalities. Extreme poverty generates fear and blighting social conditions : extreme wealth leads to selfish indulgence and domination. When these same wealthy men of the village are touched by the spirit of service, are brought into the rural reconstruction socialization programme, they experience the joy of using their powers not merely for their own advantage but also for the good of others. Inequalities are no longer so apparent. The handing out of mere charity and the pernicious custom of courting merit by an occasional feeding of the poor, is replaced by wisely organized, unselfish philanthropy which may cost no more than the former patronizing charity. His Highness the Maharaja of

Travancore's Proclamation abolishing untouchability is a great help in our work of uniting the people to work for the good of all.

The Comprehensive Programme. A study of results of programmes which have dealt with only one side of village life, shows that although they accomplish some good things they are not as fully effective as they could be were they linked to helps in other directions going on at the same time. We believe that Rural Reconstruction can accomplish a reconstruction in village life only when it attacks all sides of a villager's life simultaneously. This attack we call our comprehensive programme. As is evident in all these chapters, this idea enters into everything we do: whenever we work out a new activity we make certain that it belongs in our programme and that it helps the balance of a full five-sided work.

To us it seems that this idea of the comprehensive programme should have been as unnecessary of discovery as the recent discovery that India is a rural country, and yet the last home mail has just brought me a letter from the Head of the Agricultural Missions Foundation who writes: 'The idea of the comprehensive programme seems to be in many ways the most important principle that has found its way into the missionary enterprise in this century.'

Self-Help with Intimate, Expert Counsel. This is the way to make the comprehensive programme fruitful. This formula is standing the test of years. Intimate counsel means brotherly, sympathetic counsel, not official or austere. Dr J. Russell Andrus in his recent book, *Rural Reconstruction in Burma*, referring to the word 'expert' in my formula, points out that the expert in India is so scarce. He suggests a division of the field, that the numerous volunteer workers take time to become able for work with their respective villagers and their needs, and that they then invite experts to pay occasional visits. He would not often expect expertness in voluntary workers.

I never refer to myself or any of my Indian colleagues

as an 'expert' I do, however, expect every worker—myself and every colleague—to keep on studying and practising until he can do very well indeed the particular items of programme for which he has accepted responsibility and until he is thoroughly competent to give expert counsel in these specific practices. There is no excuse for allowing workers to stop short of ability in their special responsibilities. Young workers especially respond to this plan and are proud when they acquire real ability. For the more technical subjects we are generally fortunate enough to be able to draw on government officers or others, and we make full use of these men in our scheme of uniting all the talent of the area in the Rural Reconstruction Unit.

Reaching Down to the Very Poorest. Most philanthropy stops before it reaches the very poorest. This is true even though workers are especially interested in those who need help most—the hungry, the depressed, the outcast, 'the poorest, the lowliest and the lost' as Tagore terms them. Rural workers may be surprised but will realize this is usually true, if they will take an honest survey of their work. It is easier to hand out charity to the very poorest, but we believe in philanthropy, not charity.

Honest students of the co-operative movement in India, such as Jack, Slater, Mann and Darling, had to report that it would take centuries for the co-operative movement to reach the bulk of the peasantry. Even today the stereotyped co-operative societies do not reach or help the poorest people of India. These poorest people cannot afford to be members of the regular co-operative societies in the ordinary way nor do they understand them. They are brought in only when character is made the basis for membership and participation, and where there is the all-the-way, intimate, brotherly supervision. As we go ahead with the introduction and establishment of comprehensive Rural Reconstruction our programme will stop just short of reaching down to the very poorest unless we are constantly especially mindful of them. It will be taken up, practised, and its benefits will be appropriated by those

just above and those well above them: those who have a bit more means to meet the small initial outlay, who have a bit more background and education to understand the new way or project, who have less of hopelessness and more of vision and belief that better things are possible.

We keep ever before us the principle, *no man or woman, boy or girl shall ever be deprived of any of these benefits by reason of poverty.* This is perfectly possible if the worker cares enough about it. For every project we work out a method or scheme of participation for those who have no money at all. I shall cite two of our methods as illustrations.

We sell the eggs from our heavy laying, recently imported, Hancock strain of White Leghorns for Rs 9 per dozen to those who can afford them. To villagers in our area who can pay something we sell these same eggs for two annas each, Re 1-2 for a setting of nine. But these same eggs must be available to the villager who has no money at all, so we give him the eggs. We do not pauperize him; we charge him in our books Re 1-2 and tell him that exactly six months later we shall settle with him. From the time he sets the eggs our Extension Department gives him as much teaching and help as possible to ensure his success with his chickens, and six months later a young worker goes to him for the settlement. He may find, let us say, five birds nearing maturity. He buys one of these for Rs 3, crosses off the debt in the book and hands the poultryman Re 1-14 in cash. The other birds are worth at least Rs 12 and from them the villager will soon bring in eggs to sell at the co-operative market, or will sell eggs to others for hatching. One man who took two settings of eggs on this basis was so pleased with his results that, when his sixteen fine, yellow-legged Leghorns from eighteen eggs were three months old, he brought them to the Martandam Centre to show me. He was extraordinarily lucky for all but two were pullets. He had quite a gold mine, worth between Rs 100 and Rs 200 according to the buyer he might find, although he incurred not a single

pie of expenditure originally. This is philanthropy, not charity—our Centre got two annas for each egg.

Such methods must not be confined to the cottage industries—they must go with all items of programme—spiritual, mental, physical, social, as well as economic. The second illustration comes from the health and sanitation programme. We loan the latrine borers on the understanding that the villagers bore the holes, and that they put on the top of each hole a proper stone slab which we supply and which costs from As. 12 to Re 1. The family can do the labour of boring; if they have no money or produce of value with which to pay for the top stone it is charged in the book. The valuable fertilizer made in the bore-hole latrine can be sold in course of time and the cost of the stone top-slab realized.

Rolling Stones and Emergency Kits. Are we to carry on a quality demonstration or to jump about the country acting the part of an emergency kit? My observation is that the persons who have made a real contribution to India are those comparatively few who have been stubborn enough to resist the demands of men 'at the top' who are always running too big a machine with too few personnel, and who would jump workers here and there just to keep the too big machine moving.

We in Rural Reconstruction are pioneering. Our programme is comprehensive, yet I have critics who say of me: 'He has been for some years in Travancore; he should long ago have left that area to carry on by itself, and should have gone somewhere else.' Such critics unfortunately never find time really to study what we are doing. My Indian colleagues have so often complained to me with real feeling: 'We were disappointed that Mr So-and-So spent only ten minutes at the Centre, and saw nothing whatever of our real work in the villages.' Ten minutes is enough however to make critics talk from experience. They do not see how we had to start at the very bottom to work our way up or how we faced an absolute lack of method or experience in our staff to say

nothing of our villages. They do not see that in all of the comprehensive programme, we are travelling uphill over absolutely unknown ground; that all projects must be tried for years and finally made the people's own before we have accomplished anything permanent; that each small item of improvement needs so much experimentation and attention before it can be at its best; that there are always myriads of other needy projects we should like to give attention to; that a practical training centre for leaders from all over India, Burma and Ceylon and even beyond, must not only have a complete Rural Reconstruction Unit in action in many villages, but all of the work must be of the highest quality to be a lighthouse demonstration, teaching the best possible methods.

It has been somewhat of a struggle to remain with the home team and not to be made a 'rolling stone'. I maintain that unless I am a member of a real working team, unless I have a real rural reconstruction job of my own, unless I am actually in close contact with the village people, I am incompetent to help others. I desire to remain a part of a real team, and I believe this principle is essential for any one who would be of any use in Rural Reconstruction. With our own centre as the base, I have promised our National General Secretary that I will somehow find time to go and help from my experience, not those who simply sit and ask 'Why doesn't he work here?', but wherever Government, YMCA, mission, or private individual has made adequate plans and found some funds for carrying on Rural Reconstruction. A counsellor in Rural Reconstruction and a lighthouse demonstration area to learn from, ought to be helpful to those who are getting started. We ought to be able to save others the expensive necessity of going the whole long way of experimentation that we have gone.

Rural Background. A great new rural movement needed workers who had grown up with a rural background. K. T. Paul, although he had become an international leader, had still his home acres near Salem, and he

went back to them and worked on them as often as he could. Generally speaking our best rural workers will have been born and bred on the land. It has been my own good fortune to have a generous school and college education in things pertaining to rural development, but more than all that training I value growing up on a farm among the green hills of New York State. It was a poor farm. My brother and I began when we were very small to learn by doing. We became resourceful in studying our ways to make the things we needed, thus making a small amount go far and making the difficulties of a poor farm really stepping stones. The other day the head of a mission farm, speaking of the importance of the right personnel and the difficulty of getting it, said to me: 'The only persons who have been successful in my service are those whom I have found on the farms near by and who have grown up with me here step by step in the work.'

I mention all this because some who are starting out to do Rural Reconstruction today seem not to realize the importance of a rural background in their workers and are making the sad mistake of appointing city men. It is a short-sighted policy to relieve unemployment in the cities by taking men from the city to do rural work. If such men are to be employed at all they will need long and serious training.

Centres and Extension. About the time that I came to Rural India, the first YMCA Rural Centre was established. The centre was to be a place for showing things and methods to people who could come to see and a place for experimenting. When I was looking about for the best place for our Centre in Travancore, K. T. Paul said to me, 'Do not do as Governments sometimes do; do not choose a very fertile place where results can be shown with great ease. On the other hand do not make things too hard for yourself by choosing too poor a place.' My thought was, if we are going to help people we want to help those who need it most. I recalled the experience of Denmark where the first co-operative societies bore the name 'The Poor

Man's Co-operative', and where because these co-operatives did help the poor farmers, they very soon attracted the more well-to-do farmers who asked permission to join.

We chose Martandam where obviously the people on that poor rocky soil were much poorer than those in some parts of Travancore State where soil was better and rainfall greater. I felt that if we could make a success of helping people to help themselves under most adverse circumstances, other people could certainly copy. We settled as far from any large city as possible, about midway between Nagercoil and Trivandrum. A mistake was made in locating one of our South Indian Centres only two miles from a city. It was not really rural and although it had a more accessible market, its location was not suitable for rural demonstration.

We established the first centres about the time the Linlithgow Royal Commission on Agriculture had declared against the establishment of any more Government Farms. Perhaps some in our Association thought our centres would be in closer contact with the people than Government farms and that therefore their influence would spread better. But anyone who had studied the progress of farms and centres in other countries would know that centres do not spread of themselves. A mere centre or Government farm will never succeed in getting the people of the country-side to adopt the improved methods practised there. They never have in any country, and the Commission did well to pronounce against them as they were conducted. Why then did we establish the Martandam Centre? Because with the Centre we established the Extension Department. *It is the addition of an extension department which turns the impotent centre into a widespread success.*

I came to India after my first post-college job which was with the Extension Department of the New York State Department of Agriculture. This Department works out from the College of Agriculture at Cornell University. I was thoroughly imbued with the necessity of carrying the message and the knowledge of the college to the farmer.

As soon as the Martandam Centre was opened, I established the Martandam Extension Department; took our senior and most experienced colleague away from the Centre; told him that he was not to be there except on occasions expressly needing his help; that he was in charge of the Extension Department, the work of which was to get family after family in village after village to take up the helps taught and illustrated at the Centre. If a family gets some benefits, the neighbours are sure to copy the successful practices. The Centre is an essential part of rural reconstruction methodology, but the Extension Department is by far the more important feature.

Rural-City Co-operation. One of the most significant advances in India, Burma, and Ceylon during the past year has been the definite step towards the co-operation of people in the cities with people in the rural areas. The city YMCAs have taken a lead in this. In June I introduced the idea at the All-India, Burma, and Ceylon Secretaries' Conference and was surprised with the ready reception it received. It seems probable that every city YMCA within the not distant future will have a rural centre or at least some rural projects.

This is healthy co-operation. The city has numbers of able, talented, well educated, often well-to-do persons, many of whom come from the rural areas which have been depleted of their best leaders by opportunities offered in the cities. Many still have their roots in the country. They have cars and other transportation facilities for going out to the rural projects and for connecting the village people with those in the cities who can teach, guide and encourage. These friends will not take the place of or act as substitutes for the trained rural worker who should be rural-born, rural-bred, and rural-trained, but they will be a great encouragement and help to him. In return a city association will experience new life and new vision from this helpful and popular service.

Trichinopoly YMCA already has had a man trained at Martandam and has established him in a rural centre, the

cost of which is partially met by the District Board of the area. Rangoon City Association has had a staff member trained at Martandam. Central Travancore YMCA's Boys Work Department is having a young secretary and his able young wife trained at Martandam. Trivandrum Association Boys Work Secretary, who has had several years in the Martandam area, is extending his work among boys to the villages between Trivandrum and the Paraniyam Rural Centre. Colombo City YMCA has already budgetted for the full cost of a rural centre. They are to employ an experienced secretary from the Martandam centre while they are having a Sinhalese secretary and his wife trained at Martandam.

In touring the rural areas around Colombo to find the best place for the rural centre, I sought to find the conditions which I am recommending for other centres under city auspices. They are the same as for any rural centre, except that we would place an independent centre still further from the city. The conditions to look for are that the location should be:

1. Sufficiently near for easy administrative visits.
2. Sufficiently far away to be truly rural and natural —not affected and made artificial by the town.
3. Amidst people of different castes and creeds who can join in a really socialized programme.
4. Inhabited by a goodly number of really poor and especially needy people who will take to the economic helps, including cottage industries, not as hobbies but as means to supply their felt needs.
5. On or near a good road, near a railway station or bus route, facilities which will be a great help when marketing begins.
6. In a village which is a natural centre for other villages.
7. Adjacent to a school which is the educational centre for children of the area. The children will become interested in the work at the centre and even sooner

than their elders will begin to practise the improved ways demonstrated there. They will often teach their parents and bring them into the programme.

Freedom. The priceless privilege of freedom is nowhere more essential than in Rural Reconstruction. The rural reconstruction worker, first making himself worthy of freedom, should guard against any loss or limitation of it. The mediocre worker does not want freedom: he likes to hide behind a committee of busy men who can meet only occasionally. When he ought to be out raising money for his work, he says, 'That all depends on the committee; I must wait until they meet and make plans.' When there is much work urgently waiting to be pushed forward he says, 'Some important members of the committee are on tour (practically always some are on tour) so we cannot have a meeting now, and this work unfortunately has to wait.'

No Rural Reconstruction Centre can afford to accept a government grant if the grant has strings on it which restrict the freedom of the workers. Sometimes such a grant immediately involves the Rural Centre and staff in jealousy from government officers who, striving against officialdom's disadvantage of poorer response from the people, are trying to do somewhat similar services in their own departments. These officers sometimes think it their province to criticize destructively the Centre staff and work, as though the staff of the non-official, private centre were under the government department. This situation can be made worse by the grant necessitating a committee made up mostly of city officials, not closely in touch with the work and not experienced in Rural Reconstruction, but glad to exercise restrictions and authority. I have seen such a situation break the heart of a first class, devoted, experienced, hard worker.

I often commend the attitude of His Highness the Maharaja of Travancore whose only question is: 'Is this work helping all sections of our State?' There is absolutely no restriction or curtailment of freedom to work as

we feel we should. The policies and methodology built up through years of devoted work and experimentation must not be interfered with even for the sake of financial support.

Simplicity. 'Only he is poor whose wants are many', said Leonardo da Vinci. I must go further than when I wrote of simplicity as an attribute for the leader who teaches by the self-help method: 'The gentleman who has risen to such a high state in life that he cannot bend to take a hand with the villager in a common task; that he cannot associate intimately with boys; that villagers have, in a measure, to stand when he sits, bend when he stands, and take care that their breath does not pollute him; can hand out charity to them, but he cannot lead them in self-help.' Increasingly it has been borne in upon us during these working years that unless the whole rural reconstruction movement remains simple it will cost too much and will stop short of the millions of needy because enough money will not be available. Unless we workers remain simple, our own personal budgets will absorb so much of funds that there will not be much left for our philanthropy. Rural projects in India are already faced with the necessity of employing younger men who have not yet acquired expensive ways of living. Only by employing such men can they afford to have the necessary number of men to do the work. For Rural Reconstruction in India we want workers who are *rich in the things they can do without.* Martandam has demonstrated the possibility of a big widespread work without owning or constructing a single central building of any size.

This simplicity needs to be kept in every way in order that expenses for each project will be so low that there will be money enough to help many projects and to bring the helps within reach of the multitudes. When a rural worker gets to the place where he thinks up excuses for hiring a car to go where his cycle or the buses go, I count it the beginning of a decline in his value as a worker. It is easy for him who controls my travel budget to say to me,

'You ought not to travel third class on the railway', forgetting that I have just told him that in spite of travelling so, I used up all my travel budget for the year in seven months. I simply cannot follow out my promise to help all those places which are making a creditable effort to get started in Rural Reconstruction, if I always travel upper class.

So much money is spent on benches in India. I can never be fully happy in seeing a rural reconstruction class sitting on benches. Simple square mats placed on the floor solve the problem of how to get money for seating. They cost so little and are so convenient when the room has to be cleared for dining or for some other purpose. Even I, who grew up used to benches, can take notes just as well sitting on a mat as on a bench.

One other illustration of the many phases of simplicity. On the first morning of our Practical Training School in Rural Reconstruction every year, I find the class, including representatives from all over India, Burma and Ceylon, sitting up straight in hot coats. Our school is held in the hottest season of the torrid year. I appreciate this mark of respect, or effort to do the right thing, but I secretly rejoice that most of these coats will be gone next morning and for the rest of the course. I do not say much about it, only indicate that coats are certainly not required, and personally set the example of a clean shirt open at the neck, clean shorts, and ankle socks, and suggest that it would be wrong to sap health and vitality by uncomfortable surplus of clothing when it is so hot.

The Gandhi movement has had the good effect of getting the coats off of thousands of Indian people. Many of these coats were poor, shabby, dirty or unattractive. A university man in a city, who always looks neat, clean and comfortable tells me that he can dress well and cleanly in the *khaddar* fashion the whole year for Rs 18. For dress occasions, he just adds a simple scarf or *angavastram*. Paraniyam produces a ten-anna shirt nicely tailored from their durable hand-woven twill. My colleagues and I wear

them. Clean and sufficient clothing need not be expensive.

But at Martandam some leaders persist in wearing their coats at their work in the hottest weather. No one can work his best with his coat on. Sir William Wright says that three things are necessary for one who wishes to be successful in industry: a sound general education, a thorough technical education, and practical training with his coat off.[1] I asked a young rural leader, 'Why do some of you wear your coats almost all the time in this heat? Is it because of the influence of some missionaries and high government officials, that you feel properly dressed and dignified only with your coats on?'

'No, it is not that,' he said. 'The *dhobi* problem is rather serious; that is, it costs much to have shirts washed. By wearing a coat the shirt can be worn longer without washing.' I appreciate such a frank statement.

Here is just another need to be dealt with in the process of village reconstruction. The remedy is so easy. Every man can wash his own shirt. We have added a course in washing and ironing to the curriculum of our Practical Training School in Rural Reconstruction. A professor in the chemistry department of the Science College, Trivandrum, teaches us how to make safe, inexpensive washing soap in the home. This cost of *dhobi*-ing, the cost of coats, and dirty clothes are eliminated; another step toward self-ability and simplicity. The Extension Secretary gives demonstration in soap making, washing and ironing in every village he visits. Many articles of clothing do not require ironing; those that do, can be ironed with a simple charcoal iron.

These twelve principles are truly pillars of policy. They are pillars on which we are building.

[1] *The Madras Mail*, 18 March 1937.

CHAPTER XVIII

DEVELOPMENTS OUT IN THE EXTENSION AREA

A JOURNEY through the Extension Area with Dasiah, the young man once an apprentice but now heading up the Extension Department, will show us some of the later developments in our climb further upward with the villagers. Rural Reconstruction takes different forms in different villages, depending on the special needs of the villages, and on the interests, the abilities, and the energies of the local leaders.

Waiting Philanthropy. To make the crooked path straight, the narrow path wide; to make a highway: that is the inevitable desire of villagers who live in roadless villages. The quickening of this desire follows closely after the first self-help victory. Edaikode—called 'Jackal Village'—was roadless: away back there in the rocky foothills amidst the malaria, practically beyond the reach of missionaries who dared not stay there nights; there where in spite of the jackals running about in the day-time these poorest of poor people have made a success of poultry-keeping. Edaikode's desire for a road can be taken as typical of the desire of every roadless village out of which all the produce has had to come through the centuries, carried on heads of the people.

Several years ago when Mr Harper Sibley, now President of the United States Chamber of Commerce, and Mrs Sibley, both members of the Layman's Commission, visited Edaikode, they walked in as all others before them had done, but because I was then a victim of a motor

accident and unable to walk, the villagers smoothed a way over the fields and rocks so that my bullock cart could be hauled. Smoothed is a flattering term, but the idea for the road was born. A few months ago Edaikode, a bit more prosperous because of further participation in the rural reconstruction programme and eager to show their progress, invited the world's Rural Conference to visit them. But alas, the smoothed trace was almost lost. Self-help teaching was put into practice: over two hundred men, women, boys and girls turned out with *mamatees* and picks to change the trace into a road. When the day of the visit came all the cars but one—the new Ford unfortunately is just an inch or two too wide—drove straight through to the village. Landowners have given the right of way through their lands, villagers have contributed their labour; the Government, as it has done in many instances, can be expected to take over the road, widen it, put in concrete culverts and proper drains: a new highway to efficiency and better living will be mapped.

I am giving this as an example of what happens when people make such initial effort for roads, community wells, or other needed village amenities. I believe firmly that where the people of a village can be brought to make this initial effort, some power—it may be Government, it may be some unofficial philanthropy—someone will give the necessary help to complete the project.

Kurumathur, a tiny village of backward-class people who go out daily to work on the land of others, is built on rocks and could not boast even a footpath. These villagers have responded enthusiastically and practically to our comprehensive programme. Their efforts to help themselves attracted the interest of the Government Public Works officers who, this past year, helped to make a path six feet wide from the main road down the rocky way to the village. This path makes travel to and from the village much easier. It is the beginning of the road which will one day lift Kurumathur out of the class of roadless villages.

I carry about with me a list of villages which have no

decent wells. These villages are in special danger when cholera comes because the people get their scanty supply of muddy water from holes dug in the lower corners of rice fields. This water is never good, is easily infected, and impossible to protect. Several departments of the Government and certain institutions have money, not enough to meet the whole cost of such needed wells, but enough to make wells possible for those villagers who have first learned to co-operate and raise their share of the cost. One by one such villages, formerly divided against themselves, are being brought to co-operate and finally to claim the philanthropy which waits to crown their own initial efforts.

Cholera and Malaria Relief. The story of the terrible malaria epidemic which ravaged South Travancore last year, is a plea for more and better food; the story of the cholera epidemic which followed closely in its wake, is a plea for wells and cleaner living; the story of both these epidemics is a plea for Rural Reconstruction in its comprehensive programme. One needs no greater argument.

There is always malaria in the foothills on the mountainward side of Martandam, including a strip of country parallel with the hills. Dr Krishnan Tampi, trained by the Rockefeller Foundation and now in the Travancore Public Health Department, tells the students in our health course of the survey he made of the people living in these foothills. He noticed that there were surprisingly few children about. He found that a man might have three wives but only one child. These people are nearly sterile owing to the ravages of malaria.

Fortunately Martandam and the area away from the hills is generally free from malaria, but early last year I received a letter from the honorary secretary of a little YMCA, well out in the non-malarial belt, saying that many people were suffering in his village. The Extension Secretary went at once to investigate and reported that there was much malaria. When we first reported conditions to the capital city we were accused of creating a scare: there was always malaria down that way. We took the students

of our Practical Training School to make surveys in these villages and in every house we found people lying on the floors and verandas either burning with fever or shivering with chills. Dr Orr of the Neyyoor Hospital took the Agent to the Governor-General to one of these villages and showed him that every household was afflicted. The malaria covered a new belt ten to fifteen miles further away from the hills. The failure of the rains the two previous years had dried up rivers, leaving stagnant pools where the mosquitoes were rapidly breeding. The people were further weakened through increased scarcity of food.

Friends placed at the disposal of our workers money, food, clothing and equipment with which we were able to visit and help six hundred of the most needy sufferers. Our honorary workers following their self-help programme are ever looking for such chances of service and they are trained to do it well. When the Travancore Government realized how serious the epidemic was, it instituted relief measures on a generous scale.

The malaria was still bad when cholera, which had taken 19,000 lives in this area six years before, broke out in a virulent form among these malaria-weakened, famished people. The cholera was aggravated by the scarcity of water. One day I stopped along the road near Edaikode where about two hundred famished-looking people were standing and lying about. All were suffering from malaria. Each one carried an empty bottle for quinine. They said they had been waiting there for two days as they had heard that a doctor would come. From where I stood with them, we saw across the field a group of the faithful burying one who had just died of cholera. What a chance for cholera to spread among these malaria sufferers! A doctor did come while I was there but he had no quinine; he was the cholera doctor. The only place the cholera people, the malaria people, any unattacked people, and the cholera doctors who had been sent to help, could get water to drink was a hole dug in the ground down in the corner of a paddy field!

The Health Department cholera staff, and doctors of the Salvation Army and London Mission did heroic service in effecting isolation and in carrying on inoculation. Isolation was not easy. Certain villages were found wholly deserted, where all the people had run away when the first case of cholera was discovered. They ran in all directions, potential spreaders of the feared disease. The people in the villages where the spirit of co-operation and confidence in the local leaders, as fostered by the rural reconstruction programme, had permeated, did not run away. They obeyed the discipline ordered by the doctors and helped to combat the disease. The honorary leaders stood loyally by the doctors and worked day and night to extend the doctors' time and strength. With their full knowledge of local conditions and people they were most helpful to the doctors in carrying relief to those who needed it most.

Government was disappointed in the results of its work and treatment in the emergency hospital sheds. The diseases would not abate. The malaria would return and return. Then they added generous feeding to their medicines and immediately the results seemed miraculous. The Public Works Department co-operated, giving road work to old and young whom they fed with good, well-cooked food. 'When they were able to work, they worked, but anyway they were fed,' said the chief engineer. This generally stopped new cases and recurrences.

Dr James Simpson, Durbar Physician, commenting on this experience, says: 'It is absolutely impossible to clear up malaria like we had in South Travancore without supplying food. I bought the rice and began feeding with perfectly miraculous results. Why, I am so keen about better feeding as a health measure that, with the collaboration of the Director of Public Instruction, I am doing my very best to move Government to let us institute the noon feeding of all school pupils in the primary grades in rural areas (not in the towns). These children leave home in the early morning, remain in the schools all day without any lunch, and walk the long way home arriving late in the

evening. School feeding would improve the health of these children, make for longer life, and give them bodies fit to make use of their schooling.'

The terrible malaria epidemic in Ceylon about the same time was finally put under control when feeding was added to other relief measures. We have these two further proofs that better food for the people coupled with the other benefits of a comprehensive rural reconstruction programme will make possible the decrease of such epidemics.

Demand for Village Centres. It is natural that there comes a time when every progressive village wishes to have a rural centre 'like Martandam'. Not only villages but just now every kind of organization seems to want to do Rural Reconstruction. I have been forced to say the past year that it looks as though the next serious epidemic is going to be the starting of Rural Reconstruction Centres!

I rejoice at every new move I hear of toward a new locality or a new organization joining hands with us in Rural Reconstruction; but I do not feel satisfied with mere startings which have no definite plans or means with which to carry on. It is a comparatively easy thing to open a rural Centre, to get some great personage to perform the opening, to get praise and acclaim in the newspapers for starting Rural Reconstruction. Too many times, and too soon after such a start, the leaders come to me with their problems. I often feel burdened with problems which belong to others and which might have been avoided had the proper preparations been made. But I must and do have sympathy.

We have met and overcome similar problems one by one. The difficulties seem almost hopeless in most of these cases because there is no one ready to put his very life into the work, because the promoters do not have sufficient knowledge, and because little or no funds are available. It has happened that the person who proposed a scheme and stirred up students or others to be interested, had not the thoroughness to go with these willing workers into a village for a simple session of sustained work. Some

organizations enthused by the praise they received from the opening of the first centre, planned to open a second before they had accomplished anything at the first centre or assured its running creditably. Many persons have only the bare idea, when they write that they hope I can come soon and open a centre in their 'very advantageous place'. Every centre of rural work must have a definite and carefully formulated plan or it cannot succeed. There is so much at stake.

Another demand comes from villages where the honorary leaders, having done certain features of the reconstruction programme, wish to run centres. Two requests before us just now are typical. Both villages, within seven miles of the Martandam Centre, are pitifully poor. They both have little YMCAs run by unpaid workers in their spare time. These leaders come to the Martandam Centre to study whenever they can. Each village has a small YMCA building as a simple headquarters, the building standing on land that has been loaned by a kindly member. These associations have no money at all: there is no possibility of employing even a gardener or caretaker on Rs 10 a month. They want to improve their buildings, have gardens, grasses, poultry, bees, seed-bull and goat, weaving institution, library, to make a fitting demonstration to their village and to the villages around.

Such a centre would require constant care. Who could look after all these projects and so develop them to make a first-class demonstration, convincing enough to be copied? No possibility of employing a suitable person: no villager in his spare time could look after live stock, poultry and gardens adequately at even a short distance from his home. It seemed almost impossible. How to help these earnest leaders who have neither the time nor the money to run a centre and yet not discourage this priceless local initiative is a problem. We have worked out this solution which brings the families nearest the Association building into active participation.

All the families living near the little YMCA building

which serves as the headquarters are encouraged to take up one or more of the activities which Martandam demonstrates: livestock, family cows, milch goats; poultry, chicken and turkey raising; bees; gardening; weaving; palmyra sugar and other products; handicrafts. To these families we give all the guidance we can, through the Extension Department. Financial assistance, which is much less for us than the cost of keeping the live stock at Martandam, is given to those who keep the seed-bulls and goats. These families are so deeply interested in their cottage industries and count so much upon the returns they get, that they are really better demonstrators than we are at the Centre.

These activities in the homes are established as a definite part of the programme fostered by headquarters, the village Association, and as such are open at all times to visitors, local villagers and villagers from neighbouring places who may wish to learn from them.

The headquarters building is the centre for other features of the programme: night schools, library, public and committee meetings, lectures, exhibitions, games, boys clubs, dramas. It is a real community centre.

Such a centre with part of the activities being carried on in the homes nearby is a more effective demonstration than a centre where all the activities are located in one common place and which honorary workers would try to run. It is cheaper and easier for honorary leaders to help their community this way.

Concentration. Although our Extension Area is bound, not by a definite circle but by 'lines of strength of interest', we thoroughly believe in the principle of concentration. Two years ago we selected twelve villages within three miles of the Centre, naming them our Primary Extension Area Villages, and put special emphasis on work in them. The improvement pointed out in the Extension Secretary's report at the end of the first year offers a strong argument for concentration of effort.

Improvement is reported in practice of the cottage



KEEPING YOUNG

industries and in working such features as the cock circuit and hatching plan, greater use of the breeding bulls and goats, in the improvement of varieties of plants and grasses, in sanitation and health, in a wider use of the circulating library books, in co-operative societies and in training of leaders. Our workers gave more attention to making better feeling where there were divisions and quarrels; they were able to bring about more local giving, including several building sites and playgrounds; they gave more attention to children, conducted more thorough surveys. The understanding of possibilities created a desire for village centres. The YMCAs in these villages were improved.

This same principle of concentration of effort is effective in the use and training of personnel. A young graduate who has successfully withstood the gauntlet of apprenticeship has joined our staff on probation. When he finished his first work—learning how to handle accounts efficiently and accurately—we assigned to him four contiguous villages about two miles from the Centre as his special responsibility. I have before me the report of his first month in these villages. It is a stimulating diary.

He got acquainted not only with the people but with conditions in these villages. He explained to them that he was going to spend much time among them: they told him all their troubles, and he promised to study with them and help them all he could. He connected them with the circulating library system and began distributing books. He played games with the children and won their confidence, he spoke in the churches and in all possible societies, explaining the purpose of his mission amongst them. A chief aim during this first month was to enlist the leaders through whom he would work. He listed some special needs and with the new-found leaders made plans for answering them.

Competing in Progress. To encourage the villagers to greater effort, we have instituted the 'Martandam YMCA Progressive Village Prizes'. Years ago in our exhibition

we gave a prize to the most progressive poor villager. It is interesting to us that the villagers now have made so much progress, and each village has so many progressive villagers, that the prize can be shifted from an individual to the village. According to our new plan, a shield and prizes will be given to the villages which make the best progress in the year. A survey is made in each competing village to record conditions at the beginning of the year. Each village is instructed that notes will be taken on activities and progress during the coming year, and that judgement will be made on activities of the five-sided programme, spiritual, mental, physical, social and economic. A committee of judges checks progress periodically, and makes the awards at the end of the year.

Cattle and Goats. The use of pure-bred Sindhi bulls and Surti (milk variety) breeding goats to breed up the best of the local cows and goats has been a success. Our scheme of inducing the family owning the best cow (and who could and would feed best) in each village to breed their cows to our bulls, has resulted in some surprisingly fine progeny. The people think so much of this young stock that they will not sell to outsiders. When I received an order for ten cross-bred heifers I could not fill it because the owners wanted to keep their improved stock themselves. In this place where cows are so poor that the average price is Rs 25 to Rs 35, one Martandam man sold one of these cross-bred heifers to a neighbour for Rs 119. Later in Nagercoil, I met a doctor who had just paid Rs 75 for a cross-bred heifer. He was very pleased with her milk yield.

Our contribution toward improvement of cattle altogether is very small because it is so costly to feed the bulls that we cannot afford to keep many. We have only a few seed-bulls, and only one of them draws an annual Government grant of Rs 50 toward his maintenance. Recently in the Madras Presidency I saw ten splendid bulls belonging to a missionary and to all ten the Government there gives grants of Rs 100 each. It would be a sound policy if our

Government would materially increase the number and amount of grants for breeding bulls throughout the State.

The Baroda Government is willing to supply bulls for all sections of that State but its problem is to find enough good bulls. His Excellency the Viceroy's creditable lead has stimulated the donations of breeding bulls. Should this movement keep up, donors will soon discover that the supply of sufficiently good bulls is deplorably limited.

These statements emphasize how big a task the improvement of cattle in India really is. Dr Henry C. Taylor, formerly of the United States of America Department of Agriculture, and the International Department of Agriculture at Rome, when studying in India with the Layman's Commission concluded that the improvement of cattle in India was such a Herculean and long-time task that even the Government would need to be subsidized by private capitalists. In his opinion non-official agencies could not accomplish much. I do not agree. Suppose in the United States all the farmers had calmly waited for the National Government to improve the cattle. One of the main reasons why the cattle in the United States are so good is because a large percentage of the farmers have been helping by careful breeding and selecting.

Our extra bulls and goats are loaned out either to village centres or to other interested villages. In the latter case we find an individual who will take good care of the animal. We instruct him about the feeding and make a small financial contribution towards maintenance. We insist that a careful record of services be kept. The small service fees are given to the Martandam Centre.

The Sindhi has proved a dual-purpose animal. The half-bred male makes a good working bullock. Although the ordinary cultivator admits this, he is often hesitant to own one because the cost of feeding this bigger animal is considerably higher as he naturally requires more food. The European planters do not mind this as they appreciate the greater strength. Could we afford it we would immediately own some of the purely working types of bulls, for,

although the people ought to be interested in milk which is so badly needed, the fact is that milk is not in their ken or in the diet of their families. They are at present more interested in the working types.

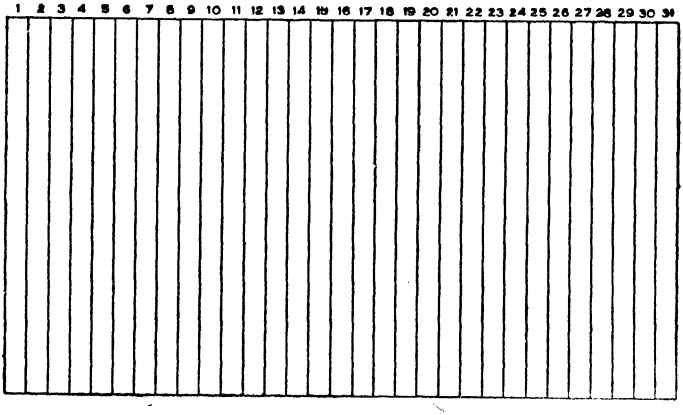
India's Hungry Cattle need feeding. Fodder grasses are going to help much in the improvement of India's cattle. We now know four good kinds. Napier and Guinea grass are well established. Soudan grass, which I recently imported, is being experimented with; its deep roots are supposed to make it especially resistive to drought. It grows from seed quicker than the other grasses. Guatemala, a broad-leafed grass, grows well in Ceylon and is proving a useful grass there. This will make us another fodder grass when we get it well established.

We are disappointed that most of the smallholders grow these grasses so feebly, having little of them when they might have much more. This is due to several reasons: lack of water, no fencing, the ingrained age-long custom of never sowing grass seed and being satisfied with only the weeds that happen to grow, and the general lack of enterprise. Those who do raise these grasses show a lamentable lack of system in planting and in cutting. Grasses have possibilities which a few are realizing. One village teacher has done so well that he has a surplus which he sells in the grass market.

I give overleaf the systematic plan of Father LeGoc, an enterprising priest whose farm I visited in Ceylon. We are recommending this plan to all our villagers who grow grass for stall feeding.

The whole grass plot is divided into thirty-one sections. On the first day of the month, the first section is cut and fed; on the last day the thirty-first section. On the first day of the next month, the first section is again ready for cutting.

Even if the grass is in different plots, the plan can just as well be used, assigning sections definitely for each day. If irrigation is possible, a ditch may be run along the higher side of the plot and the water be let into the different



sections as required. Father LeGoc has a concrete water pit at the end of his cowshed. In the pit, manure and urine from the cows is mixed with water, and the enriched water is run into the ditch at the top side of the grass.

Stall feeding is the solution of the cattle feeding problem in India. Sufficient pasturage simply is not possible.

Reading for All. The literate people of every village are keen to read, but they are not accustomed to having a single bit of reading matter in their homes or even available in their villages. This means that once out of school, books are outside their consciousness.

It is short-sighted for rural reconstruction workers to sit in their Centre circulating library among its hundreds of good books and expect the villagers to come in for them; but too often they do only sit. Our extension workers must be alive, they must put these books into the homes and into the hands of the people in the villages, until they become book-conscious. It is important that they do this without pauperizing the people: the people must pay a membership fee or a contribution to the circulating library. Because they are pitifully poor people, we had to work out a scheme whereby they could pay for the use of books, not in money, which they did not have, but in kind—in some product of the home which they did have. A whole village through its YMCA, or other organization or a

leading citizen, can become a member of the Centre library and have the use of the books a whole year for one rupee. Even this amount is accepted in kind: each interested reader may contribute one fresh egg. Another scheme is offered for the villages which do not become members of the Centre library. The Extension Secretary loans ten books to a village at a meeting. The village through some responsible person is induced to keep these books one month for a fee of two annas. The enjoyment of having these first ten books may stimulate the village Association to become yearly members at the cheaper rate. When books are thus put into the hands of villagers with some small effort of payment on their part the avidity with which they are valued and read is not exceeded, I think, in any country.

The energetic honorary librarian of one of our Rural Centres so effectively distributed the thousand books in his library that the binding was worn off the books and they had to rebind them several times. Another Centre not far away owned an even larger library with more modern books but lacked the energetic librarian, which resulted in a poor circulation and fewer books read. We have worked out an arrangement whereby the sluggish library loans twenty-five books at a time to the active one. The sluggish library is made to take the books regularly to and from the active one and to keep the proper records.

A children's section in a rural library, if we select and put in the right books, discovers Indian children to be as 'book hungry' as children elsewhere.

I have written about the children's section of the circulating library with not only children's books but *children's games*. But toys for children in rural homes is such a revolutionary idea that the hands of our Indian workers still go up in horror at the thought of loaning games to children. This may be one reason why they have been slow to develop this games loan system. 'Why, they will destroy them at once,' they say.

They are fully conscious of the lack of discipline too

often found in the homes. I agree that games must be very substantial and if possible washable. To meet these requirements we have brought from abroad, and have had made locally some fairly indestructible games. Games like *Peggotty*, and halma may be made of tin instead of cardboard. Wooden games like dominoes are useful. Such games are loaned in the name of the child's father or mother who is made responsible. Games are drawn from the library just as books are.

Better Exhibiting. The idea of holding exhibitions is becoming more and more popular. So many exhibitions are being held that there is need of study and exercise of ingenuity and imagination to vary them. The demand upon the Martandam staff to co-operate with exhibitions run by others has become a serious matter, for, while we want to co-operate and help towards the success of these efforts, and while we believe in the inspirational and educational effects of exhibitions, they take such a lot of time, are upsetting to the regular programme, and are costly. These requests come from many places not only in Travancore but outside, as far away as North India. Generally the sponsors of the exhibitions are not able to pay the cost of transportation or for the new demonstration equipment required in each case, to say nothing of the salary and expenses of demonstrators who have to stay with the exhibitions throughout.

Exhibitions are generally unnecessarily long, being arranged by city people and those whose exhibits are not perishable as a part of ours are: chickens, cows, goats, bees, plants and vegetables. We do not like our annual Rural Service Exhibition to last over two days. When co-operating in an exhibit like the Sri Chitra Birthday Exhibition in Trivandrum which lasts three weeks, we run relays of live poultry, taking one set of fine birds away just as they begin to droop from the confinement, and bringing another set. Our feeling is that even this exhibition could be shortened without any loss, and that all the people who see it could and would do so during fewer days

if they had to. It is very costly and wearying to continue first-class demonstrations so many days and nights.

I think we are improving in the matter of display, though the incredible lack of imagination in workers is nowhere more apparent than in the way they at first set up exhibitions. Lack of imagination is an ally of shiftlessness. And the latter sometimes prevents the preliminary preparations that are necessary. How difficult it is to train a staff to set up an exhibit in such a way that it will attract the visitor and stimulate attentive observation. How difficult it is to teach the use of contrast and conspicuous placing: often articles are placed so far away or so close together that they cannot easily be seen. To guide observation and understanding by labels, placards, pointers, diagrams and charts seems to be too strange to learn. Descriptive placards when they are made are apt to be deficient in number, and either so small they cannot be read or so big they obscure the objects exhibited.

At most of these exhibitions it is desirous that products be sold to help defray the cost of exhibiting, to encourage the cottage industries and to enhance the income of the Rural Centre. If sales are desired, the arrangement of the exhibition, and labelling of all articles is absolutely essential. The exhibition at the Mysore YMCA World Conference is a case in point. Here was a rare opportunity for such sales, with buyers from many countries of the world not only financially able but interested in Indian wares, especially in the products of the rural Association Centres. These delegates later in a friendly way criticized the 'lack of imagination' of our exhibitors, in that they did not seem to realize that people would not buy things if there were no price tags on them or at least somebody in the vicinity who could state the price without hesitation. They said many people did not realize that the things were for sale, but thought they were simply for showing what the Centres made. Further they said it was not made clear that these things were the products of the Rural Centres in which they were all interested, and not simply a

collection of Indian products. The delegates complimented the exhibitors on an interesting exhibition but felt the sales were only a fraction of what they might have been.

Another mistake we are now correcting is that those who see the usual Rural Centre exhibition get the impression that cottage industries and their products are the whole of Rural Reconstruction. The many features of the comprehensive programme—the spiritual, mental, physical, social activities as well as the economic—should somehow be illustrated in the exhibition. To do this requires vision, ingenuity and energy on the part of the staff as they are difficult to exhibit. Some features can best be illustrated by good enlarged photographs with brief descriptive captions. To this end I have recently prepared and framed fifty-five such pictures, each illustrating one activity of our comprehensive programme. Forty of these are placed on a wall around the map of Martandam and its immediate Extension Area with tape lines running out from the maps to the pictures. The other fifteen pictures are exhibited around a 'five-sided triangle' and all placed on a board seven feet high. They illustrate how the needs of the villagers are met. Such pictures must be enlarged to be of any value.

The pictures are put up in the same way at the Centre when they are not out at exhibitions. They are very helpful in giving visitors, who come for a brief look at the Centre with no time to see the actual work in the villages, a better idea of what is going on. The permanent exhibit at the Centre also shows the results of work in the villages and serves as a daily stimulus to visitors.

Sales Depots. The Government of Travancore did a very helpful thing when it established sales depots for the sale of local products not only in its capital city, Trivandrum, but in several other parts of India. This partially helped us over a real difficulty. Often we considered the need for having sales representatives in cities to sell the improved products we had been responsible for getting the people to raise. We were always forced to the

conclusion that the cost of rentals and salesmen would absorb all the profit made from increased sales. We actually tried it out by putting a salesman in the city of Madura. The result was a financial loss. I proposed to the Marketing Department of the Government of India that they run a marketing stall for eggs only in Madras.

In our Government Sales Room in Trivandrum, in its strategic position in the centre of town, we can exhibit any or all of our Martandam improved products. Paraniyam Rural Centre also places its products there—honey, cloth, towels, arrowroot flour, and tomatoes. Private bee-keepers and others from the villages also place their products here and have an equal chance for sale. The Sales Depot takes ten per cent of the price of goods sold, and there is no charge for displaying goods not sold. We have received also some benefit from the similar Sales Depot for Travancore products in Bombay.

Our new sales scheme consists of placing neat, glass sales cases in YMCAs throughout Travancore and beyond, and with other sympathetic organizations. Our products are displayed in these cases. We offer a small percentage on sales to the secretary or other local person who will look after them, arrange the products inside attractively, keep everything neat, tidy, and clean, and push the sales. He and the Centre Secretary are constantly in touch with each other to keep the supply always on hand. Not in all places can a man with the necessary business avidity be found, but where he can this is excellent co-operation between city and village.

Along with new sales developments the use of the *Auction Method* must be mentioned. People the world over like auctions. It is often said that the people of India like an auction so much that if one rupee is put up it will be sold for more than a rupee! Along our Travancore roads at night one may find a number of auctioneers entertaining the large crowds about them—and selling their goods to them.

So far as we have live salesmen in charge of selling our

rural products it is possible to sell part of the superior products by auction. We have found the auction useful as a sure method of disposing of surplus stock at any time.

Trust Funds. Could we do any better thing than to set the example of proper accounting and auditing of all funds in any branch directly or indirectly under our direction ? Many may be surprised to know that proper accounting and auditing is unusual. Large sums of money are raised for relief, or large sums are taken through gate money at an exhibition or at sports but seldom do we ever see the accounts or any audit of them. One pernicious practice in respect to relief funds, is to delay a vigorous application of the funds to the suffering and then when the acute need for relief is past, to appropriate (misappropriate) the remaining funds to some other purpose which may be a hobby of those who control the money.

In the many-sided work of our Association creditable pieces of service are run by unpaid workers who have to do them all in their spare time. We have to be careful not to cause them unnecessary routine such as would be handled by paid clerks in other organizations. In villages it is not the custom to keep proper accounts. The accounts for our projects will not automatically be properly or completely kept even though the work is being guided by honest self-sacrificing men. When a village does well, as at Paraniyam or Oollannore, the marketing, schools and other activities involve quite big business. The muddle the accounts are almost bound to get into are sure to be a worry to those honorary workers.

Our task is to make them see that a system of accounts with an annual audit is actually a help to them and that in insisting on such a system being established in every case, we are helping, not hindering. Fortunately some of the very best qualified accounts officers of the State are willing, as a piece of honorary service, to direct the establishment of a simple but effective system of accounts for every project and to supervise the audit of each account as well. They are sympathetic and friendly, yet

meticulously exacting. This practice is very different from that of inviting as auditor some friend who knows little about account-keeping and is too much of a friend to discover and report discrepancies.

This strict method of keeping accounts gives a safe and happy feeling to all who are responsible for funds. We believe this service of establishing simple, correct systems of accounting and inventories, and demanding an exacting audit for all accounts such as Association district accounts, centres, co-operative societies, schools, relief funds, is not only our duty but one of our best training services, and a right example to many others who handle trust funds in the same areas.

Correct Weights and Measures. Weights and measures so vary from village to village in our parts that it is impossible to convey a correct idea of quantities when speaking to people in one place about those used in another. The same terms in the vernaculars seem not to mean the same amount in two places, and within short distances there are different names for approximately the same amount. English terms of weights and measures are used by the local people, but no one knows the equivalent of these terms in the vernacular. When we get into the marketing of improved products this confusion of weights and measures is a serious difficulty which must be corrected.

For liquids we use mostly the English fluid ounce even if the quantity is several pints or quarts. There is need for accurate weighing equipment for very minute quantities and for large shipments. European style spring and balance scales are generally too complicated, too breakable, and far too expensive for the villagers, though a Rural Centre should possess a good set. For general village use we have found nothing better than the common bar balance with pans or platforms. Such balances can be made locally in small or large sizes so that they are very sensitive to minute changes of weight; but we always have to give careful attention to see that the metal weights are correct. The villagers need help towards a supply of

accurate sets of weights graduated from a number of pounds to fractions of an ounce.

Collectors of Firewood. All through these years some of the saddest people we have known are the boys, girls and women who walk daily from near Martandam to the malarial foothills and return at night with headloads of firewood. The foothills are eleven miles away. When they return they must go from house to house, trying to sell. They are hungry, having had only a poor meal of rice soup in the early morning, and perhaps a bit of jaggery sugar at noon. They must sell the wood they have gathered in order to buy the night meal. The frugal housewife who thinks so much about low prices, consciously or unconsciously takes advantage of the fact that hunger makes it absolutely necessary for the wood gatherer to sell at once. She haggles the price of the wood down to a pittance. The tired hungry one goes away without money enough to buy a decent meal for herself and her dependents.

It was a wholly inadequate help for us to provide night schools, as we have, for those who had absolutely no chance of attending day school. The poor hungry people needed more than schools. Mrs Farr, a planter's wife who lived for a time near Martandam, was distressed by the plight of these wood gatherers. Through a gift from her we have been able to establish a wood depot at our Martandam Centre. To the simple yet sufficient little building the weary wood gatherers come direct when they return from the hills. A young paid attendant receives the wood, weighs it on a set of our accurate balances, and pays the gatherers at once according to the weight of the wood. They can then go to buy their food having received an honest price and being freed from hours of weary bargaining at doors.

The buyers come or send to the Centre Depot for wood which is sold to them by weight. This did not work perfectly at first, for some still tried somehow to get wood cheaper and even a few of the wood gatherers prefer to try

their luck by the old method to which they were accustomed. In any such project much depends on the alertness and activity of the Centre staff member and his committee of interested local citizens: they must personally acquaint members of every house with the whole idea and purpose and benefits of the scheme, make them understand that they are being helped to a dependable supply of good wood at a uniform price: they must enlist all the wood gatherers and make them understand that this philanthropic scheme is to help them, prove that it does, and that the depot is the wood gatherers' own.

Keeping Young. We are a young men's association: how to make the young men's association younger has been a constant preoccupation with us in our district. I began in 1923 encouraging work with boys. In a country where there is little belief in the abilities of youth, it was not surprising that the places of management and responsibilities, even in a young men's association, were held by old men, mostly retired dignitaries. I have a deep appreciation for the service that these men have rendered and do still render, but my observations indicate that although experience is of priceless value, it is the younger men who can accomplish most for India.

I am a great believer in giving younger men and boys a chance. Employing younger men who have smaller financial needs, as a means of helping to solve the problem of support of the work, would perhaps not be justified if they did not accomplish more as well. Through using men and boys in places of responsibility, we are building for the future: they will be efficient workers while they are still young.

Travancore's athletes just now winning the Olympic meet in Madras is a splendid example of the wisdom of starting with the young. I look upon the raising of athletics from chaos to trained sportsmanship, through the development of the Travancore Athletic Association, as one of the most successful accomplishments with which I have been connected. For years we depended almost

entirely on the college athletes, who had had no training during their earlier schooling and who would not train well then. Five years ago we extended the scope of our attention to all the high schools of the State, with training and competitions in each school and in sectional meets. These young boys responded wonderfully, and last year in the meet at Trivandrum we found the high school boys competing at the same time in the same field, though not against the college men, making better records than the college men. Some of these boys are in college now. It was a combined team of college and high school competitors who brought back the cup.

In such a rural area, if we do Rural Reconstruction well with emphasis on the young, we can almost let programmes for others look after themselves. We are employing two full-time and one part-time boys' secretaries. One spends part of his time with boys in the city of Trivandrum and the other part with boys in nearby rural villages—another example of co-operation between city and country. Two more secretaries are just now being trained for boys' work.

We have groups of boys at our Centres and Associations and in different parts of villages and cities, ten boys of near age in each. Rapid progress in placing responsibility on the boys themselves is noticeable. The boys plan their own programmes and carry them out with 'intimate expert council' from the boys' secretary. People of Central Travancore trembled when one of our boys' groups arranged a big meeting in the high school at Mallapally. Bishop Moore, Anglican Bishop for Travancore and Cochin, was to be the speaker under the presidency of one of the boys. Such a thing had never happened before in these parts. The boy presided well and the meeting was a great success, talked of for miles around.

The Rural Drama. The drama continues to be one of our best aids to entertainment, education, and socialization. The largest gathering we have ever had at Martandam Centre was on the closing night of our last Rural Service Exhibition, when we staged four one-act dramas. The

whole country-side seemed to be present, as many women as men this time. All of the fifty-three students of the Practical Training School, men and women, took part.

The plays *The Durbar of King Cereal* and *The Fountain which lived in a Pitcher* were in English; *The Phantom of Foods*, in Malayalam; and *David and The Good Health Elves*, in Tamil. Some of the audience did not understand English but the action was carefully worked out so they could partly follow the stories. The vernacular dramas were full of fun and laughter as well as instruction on what to eat. The huge audience was quiet and attentive, completely absorbed in the plays. The little library platform served as stage. The plain background of green ferns contrasted effectively with the gay costumes. To show the rural reconstruction leaders in training how the villagers use dramas, we visit at least one village where the boys enact a play such as *Out of the Pot into the World.* With their improvised make-ups, costuming, and staging, very simply and inexpensively done, the villagers are able to produce some splendid effects.

One of Emily Gilchriest Hatch's most popular and useful new plays is *On the Road to Market* designed to teach kindness to animals. The cruelty practised all around us, seemingly without much thought, is horrifying. Talking and preaching does little good; the printed page is almost impotent; the drama is again our powerful means. This drama brings actual animals onto the stage showing the common cruelties familiar to all the audience though perhaps unrealized before. In the course of the play the balance of justice turns, the animals become masters and do unto man that which man has done unto them. A little boy carried by a monster chicken across the stage hanging by his feet with his head down is anything but comfortable and happy, as he lets the audience know in no uncertain terms. The situation is screamingly funny: but many chickens are carried to market after this play with heads up.

Closely allied to the drama are the *Folk Dances.* If we

have helped to save these dances from passing into oblivion we have performed a service for the culture of the State. Fifteen years ago the only people who knew and loved these old folk-dances were very old men. Years before the Christians had bowed to a judgement which ruled out dances because they were danced to songs of Hindu lore. The Hindus began to think their dances were old-fashioned. When we first saw them danced by a few boys in a remote village, more because an old man bullied them into learning than because of appreciation, we were deeply impressed with their beauty and value. Beautiful figures danced in an intricate rhythm, valuable exercises for muscle co-ordination: we applauded and asked for more. Practically every village now has its dancing troupe. The old dancing-masters are recalling all they know and handing the picturesque descriptive dances on to the younger generation.

In this case, as in that of other dying arts such as the *Kathakali*, a little encouragement from one in whose opinions the young people had full confidence was all that was needed. These young people, both boys and girls, were immediately eager to learn. How happy were the old men that again they could teach, and what energy they put into it: dancing with boys until exhausted, then standing aside, directing and beating time with the cymbals, singing their throats hoarse.

This year at the annual Rural Service Exhibition villages vied with one another in a folk-dance festival and exhibition. Everyday the judges watched the different troupes. Hundreds of spectators watched with keen interest. As a drawing attraction for an exhibition, and as an entertainment dances never fail.

Folk School for all the People. Here is something new in folk schools. I am telling about it here rather than in the chapter on training leaders for it is education for the whole people.

For two years now we have held at Paramathanapuram, Agasteeswaram, a folk school which carries on for a week

a valuable programme for old and young. The school is organized by an honorary secretary of the six little YMCAs of that area who has had training at Martandam. The people from all the villages around come to see, to enjoy, and to learn from the demonstrations, lectures, and other features of the programme. There is no regular registration as in our training school for leaders. Men, women, and children come to as many of the sessions as they can. The programme is made up in advance, printed in the vernacular and distributed in the surrounding villages. The Chief Secretary to Government issues orders to officers of all Departments in that area to accept all invitations to help with the school. Members of our Martandam staff help. All available talent is used.

This is an important development because such simple schools are possible for all parts of India, and cost almost nothing. The total budget for this Paramathanapuram school is less than Rs 20.

The Rural Development Association is our nearest approach to an area membership. This Association grew out of our efforts to co-ordinate all rural activities and bring into one working group persons interested in rural work, whether or not they belonged to one of the village Associations, clubs, or co-operative societies. When the organization was first created membership was confined to the immediate Martandam area but later its scope was enlarged to include all South Travancore. The name of the organization is changed to the South Travancore Rural Development Association.

All persons who underscore their interest by contributing four annas or more a year to the expenses of the Martandam Centre and Extension Programme automatically become members, and receive membership cards for the year. This method gives rural work a more representative membership than a city YMCA could probably hope to have, including the more wealthy and influential men and women, as well as the poorer labourers, from all communities. This Association at present has a non-Christian

majority. Its committee is advisory in relationship to the Centre and Extension work, and the honorary secretary of the Development Association is a member of the Centre or Extension staff.

The Association does not depend upon bringing members and others into the Centre for its various meetings and functions. It holds meetings or other programmes under its auspices in any place in South Travancore. If a meeting is held in Nagercoil, for instance, the Nagercoil members take full responsibility and make all arrangements. Such functions bring the people of all sections to feel that even though they live at too great a distance to come often to the Centre, they are just as definitely a working part of our rural reconstruction programme.

CHAPTER XIX

THE EVOLUTION OF THE JUNGLE FOWL

MAY the little wild fowl always live in the Indian jungles. The sudden startled run and the flying of a wild fowl always thrills us when we walk through Indian jungles. I am impressed with the similarity between the wild hen and her domesticated sister, the tiny little Indian country hen who ekes out her meagre existence around so many homes.

There seems no doubt that the credit for being the first to tame the wild fowl is due to the Indian people. They tamed the hen, but they did absolutely nothing to improve her, so that she has remained through centuries of domesticity just like her wild sister—and no better. Like the wild bird her idea is to lay only a nest full of eggs, about nine, then sit on them and hatch them into chicks. She will expect to repeat this process once or twice later in the year. With that she considers her work well done.

Experts tell us that in every one of the wonderfully improved breeds of fowls we are now bringing back to the Indian people, there is this ancient Indian (Asiel) blood. What a difference has been accomplished ! Western traders took the little Indian hens to various European countries and to America where scientific study and great devotion has been put into the task of improving them by most careful selection and by breeding only from the best in each stage of improvement. The story of what has been done to improve hens, until one called Lady Cornell weighing only 3.2 pounds laid in a year eggs weighing 29.5

pounds, 9.2 times her own weight, is a story of real accomplishment. Another, Lady Macduff, laid in twelve months 303 eggs weighing 42 pounds. I have brought back this improved type and said that they shall be available to every man or woman, or boy or girl—even the very poorest.

The Indian villagers were slow to accept poultry-keeping as a profitable cottage industry. There came a period of doubt when, because of ignorant handling, the birds did not thrive, when disease decimated their number, and when the market dealer refused to recognize size or quality. Not until the co-operative marketing of quality eggs was introduced, did that doubt vanish. Then the villager had to learn business methods and principles.

There is no doubt now in the line of happy faces at the Monday and Thursday morning egg markets at Martandam and Paraniyam. It is literally a line of faces for they have actually adopted the queue system. Age, caste, and social position are put aside and the earliest arrivals take the front places. No longer is the small child with one or two eggs pushed into the background. When an important citizen arrives he stands at the end of the line and awaits his turn. Everyone is happy; order is established. We have to go very early on market mornings if we want to see the people, but it is inspiring to see this predominantly young crowd who have walked in barefooted from many villages to see their eggs weighed for size, tested for freshness, marked with the producer's number, stamped with the Martandam trade mark, attractively and safely wrapped, and finally packed. Happily they carry away money twice or thrice the local price for ordinary eggs.

The Co-operative Egg Marketing Society has now been entirely handed over to the egg producers. Ever since we started the marketing we have urged the members to stay each marketing day to help with all processes, so they might learn them. We said to them, 'Like everyone of the projects we are teaching, this egg marketing must become your own, you must learn to do it yourselves, then no

matter what may happen to us or to the Centre, you will understand the process so well that you can surely carry on permanently.'

In October 1935 they said they thought they were ready to take over and would like to try.

Our reply was, 'Certainly, try. We are not certain that you can keep up the quality, find your own customers, and carry on all the business for such an exacting clientele who pay good prices for quality and service, and not for charity. Also the rural reconstruction scheme for the Martandam Area requires that there be first-class egg marketing at Martandam. If you do not do it satisfactorily we shall again have to manage it as your agent as we have been doing, or we shall run marketing of our own.'

We insisted that they must work entirely independently of us. We pointed out that it would be no test, that it would prove nothing if they conducted their business at our Centre and leaned on the Centre secretary with their major problems and correspondence. They agreed. They moved down the road to a rented house and compound, which the owner remodelled to suit their marketing needs. They whitewashed the building inside and out and put up their sign 'Martandam Poultry Co-operative Society No. 1739'. We loaned them a young worker to be their business manager for eight months. They paid him and also hired a clerk. At the end of the eight months they advertised for a business manager. It was interesting that none of the B.As. and M.As., who are begging for jobs as government clerks or teachers on as low as Rs 10 a month applied for the business managership of this prosperous Poultry Co-operative which pays Rs 30 a month. It is an exacting job. Did they not feel competent? Was it not dignified?

The Society secured as business manager Daniel Abraham, a young Martandam High School graduate who like so many other lads was attracted by all the interesting activities at the Centre when he was in the adjacent high school. He joined our boy scouts, became a member of

various other boy groups, and attended boys' camps. Finally he became an apprentice and helped with all the activities of the Extension programme. With such a background of training he was an excellent choice for the business managership. He works not only at his headquarters, but he makes a general improvement of poultry and the development of poultry-keeping in the Extension Area, which we used to do, a part of his responsibility. Our Extension Department co-operates with him, giving attention to those whom he does not reach, to those who are receiving eggs from the Centre on the hatching plan, and to those who are being helped by the cock circuit.

For two years now the poultry-keepers have done their own marketing. They have not let the quality drop, they have kept up the volume of business, and have not lost their customers. They have marketed up to 13,275 large eggs a month. We personally are among the customers; we criticize, make suggestions and are as interested as ever in finding new orders.

Co-operating with our rural reconstruction programme, Abraham, like any other citizen, honorarily helps with other phases of our work. A lover of cattle, he acts as secretary of the Martandam Cattle Breeding Association, whose membership comprises those cattle owners who breed to our service bulls and who in other ways are working for the improvement of cattle.

The poor country hen is no longer to be found in some places. Paraniyam village people, who formerly sent their improved eggs all the seventeen miles to Martandam to be shipped from there, now do their marketing direct to their own customers under the auspices and direction of the Paraniyam village YMCA, using the same careful method and guarantee which they learned at Martandam. My little girl finds it pleasant to point out as she drives along the roads how all the hens and chickens running around the small country houses show signs of improved blood. In these places the jungle type of country hen is gone forever because the people know she is not profitable.

The improvement has been brought about by grading. Grading is the breeding up of common stock by the use of pure-bred sires. Breeding the best of the Indian game hens to pure White Leghorn cocks gives immediately better layers than the Indian hens and better bodies than the Leghorns. Authorities have spoken of the failure to make the most of grading as the greatest mistake farmers commit. If grading is continued for five or six generations, using pure-bred sires of the same breed each time, a uniform type of grade fowl can be produced resembling closely the breed of the male, having the laying propensities of that breed and more disease resistance than the pure-bred.[1]

From the first cross we have recorded a remarkable increase in size and number of eggs; sometimes the egg is as big or bigger than that of the pure-bred. There is undoubtedly an increased hardiness and disease resistance in the graded fowl.

It is possible to produce good grade fowls in an area much faster than pure-breds. The villagers may think a great deal of their pretty all-colours-of-the-rainbow cocks, but it is absolutely essential that all country cocks be disposed of if grading is to be successful. Some remuneration must be given for these rejected cocks. We are rigidly refusing these benefits to anyone who does not co-operate.

Our Cock Circuit has greatly speeded evolution. Any poultry farm will hatch approximately as many young cocks as pullets, but for breeding purposes, it requires only one cockerel to ten pullets. These fine surplus fellows are invaluable; they are so essential in the cause of poultry improvement that they should hardly be sold at any price.

We put all surplus cocks on circuit. The cock circuit is one of the interesting charges of a young extension worker. His duty is to schedule each cock in advance for two months with one family. The only condition imposed on the family is that they keep no country cock. The family knows definitely that it must get eggs and get them

[1] D. Spencer, Hatch, *Poultry Keeping in the Orient*, p. 63.

set before the end of these two months, for the cock is scheduled in the circuit book to go to another family for the next two months and without fail he will be moved on time. By this method one cock can help to improve the poultry of six families in a year. Our cock circuit is one of the most successful and highly multiplying schemes we know of.

The terrible fowl pest or cholera is still levying a heavy toll, but the feeding, breeding and marketing we have instituted has made poultry-keeping so profitable that people do not get discouraged when repeatedly they lose their fine fowls. Our circuit cocks run a dangerous gauntlet with this disease about and the mortality rate is high. No sure remedy has yet been found—strict isolation is the only method we have found useful, but villagers, including rural reconstruction workers who have had years of training, seem practically unable to understand and maintain strict isolation. They seem to think they have isolated if they move a sick bird any distance, even if all the other birds follow along, and stick their heads through the slats of the isolation crate to watch the death struggles. In western countries Governments teach by force even the stupidest poultry-keeper what strict isolation means; they insist on it; and they eliminate such diseases as fowl cholera from their countries.

I have represented to the Animal Husbandry Department of the Government of India that this fowl pest is a matter of major economic importance and appealed to them to take adequate steps to find an inoculation or to enforce isolation so as to eradicate this disease. They inform me they are preparing to do so.

More than a year ago the Marketing Department of the Government of India became interested in our egg-marketing which we have built up over years of study and experimentation. Several of the officers came to study it and spoke highly of it compared with other egg-marketing they could find over India. They were concerned, however, that the improvement of poultry has become so

widespread through our methods that there are in the Extension Area on market-days a considerable number of large eggs from improved hens which our Centre and the Martandam Poultry Co-operative do not have orders for. These extra eggs go into the old-style slow marketing system or are eaten at home.

The marketing officers are also concerned with all the little country eggs and ordinary unimproved products which we do not consider we should include in our marketing as we are discouraging ordinary products and cannot and should not compete with those who sell them. The improved eggs from the villages are brought in every marketing morning by the producers themselves, or their children, without any collecting effort on our part. This we are told is rather remarkable, and I found that even a man like Mr E. A. Slater of the Presbyterian Mission, Etah, who has done so much for the improvement of poultry, says he has never been able to get the people to bring in their eggs. The same is true in Baroda. Because of our policy to help people upward on all sides of life simultaneously, I would not be interested in collecting eggs over a wide area unless we had other contact with these people. Though an important service, it would not in itself be important enough. The Government of India Marketing Officers, whom I saw in Delhi, asked me, 'Could you not set up a system for bringing in to your market these "extra" eggs?'

'Yes,' I said, 'we know how to get the people to produce more and better eggs, and I can at any time set up a system for bringing all the larger eggs into our market.'

'Then you should do that.'

'No,' I replied. 'You can hardly realize the effort it has taken to create appreciation among buyers for the fresh guaranteed eggs offered in India, and to get them to pay the necessary better price. We are getting now almost to the limit of the number of customers we are able to find. We have, with the missionary spirit, taught our method (something that business firms will not do) to all who

come to learn. Some of these people are nearer to our best markets and have become our competitors. So while we can collect more eggs at any time, I am unwilling to raise the people's hopes when I might have to tell them later we had failed to sell the eggs they had brought in.'

'It does not matter if you do fail,' said Mr Livingstone. 'We shall have learned something.'

'Mr Livingstone, we can afford to have no failures. I shall ask the people's co-operation in nothing until I see the way to a reasonable survey of success. The man who has co-operated in a failure thinks of himself as experienced—so experienced he will not try again. It is twice as difficult to interest him in the next project. I am unwilling to institute the collection of any greater number of eggs, until *you* find a way of selling them. While we have almost reached our marketing limit I believe that the Marketing Department of the Government of India now having relationship with local Government Marketing Departments and officers all over the country can arrange for the extra sale. Then I shall collect all the eggs from improved hens with no difficulty whatever.'

My feeling still is that the primary purpose of institutions like ours is experimentation and demonstration. We have experimented and have demonstrated both how to improve the poultry and how to sell the eggs. There comes a time when the growth of such a process should involve upon national Government Departments, like this Marketing Department of the Government of India, responsibility to help toward increased sales. The biggest need is to educate the general public, first in the value of eggs as a food, and secondly in the superior value of fresh, well-cared-for eggs. This needs to be done through a widespread campaign which can only be accomplished by the national Government. Such helps as reduced shipping charges for perishables, free return of empty crates as maintains in other countries, refrigeration, must also be arranged by the national Department.

This Marketing Department of the Government of India

is trying an interesting experiment in our area. They brought a grading machine from England and set it up at Kottarakara, Travancore. For some months they received eggs from the two biggest egg middlemen in these parts. There is no organization in the Kottarakara area working for the improvement of fowls. Naturally most of the eggs are of one rather uniform small size. The machine has now been moved to Chengannur in Central Travancore, the headquarters of one of these two big egg merchants who is supplying the machine with eggs. This again, is an area where there has been no work done for the improvement of poultry.

We shall co-operate with this venture in any way we can, but I am firmly of the opinion that the improvement of the poultry of the country is the fundamental which should proceed and underlie the whole process of successful production and marketing. It would seem hardly the right way to begin with the big middlemen, without any direct touch with the producers, and without any assurance that a portion of the increased income from helping the middlemen sell eggs would go to the producers. The educational programme should come first.

If a market for large-sized, fresh eggs is assured, there will be any number of villagers who will become keepers of improved poultry.

CHAPTER XX

CHANGING THE MIND OF THE INDIAN BEE

THE little Indian bee has come into her own. We no longer feel it necessary to bring foreign bees to India, because we have found out how to change the mind-set of the Indian bee and interest her in making a surplus of honey, whereas formerly she had not the slightest intention of doing so. A surplus is the whole necessity, if bee-keeping is to be the successful Indian village cottage industry it now is around Martandam.

In 1928 I brought bees from Italy at my personal expense and with so many interesting difficulties along the journey that *Asia* published the story.[1] We thought then the importation of better bees was essential because of two great faults of the *Apis indica*: they seemed migratory in nature; they were poor workers. We have learned how to overcome both of these obstacles.

Indian bees are not naturally migratory. They never leave the hive unless something is wrong. If he eliminates the wrongs the bee-keeper never has this experience which was so common and so disheartening in the early days when we first started teaching bee-keeping in the Martandam villages. It was discouraging for the new bee-keeper to find his hives quiet and still, dead and empty. The careful bee-keeper now inspects his hives once a week, clears them of any pests inside, and makes certain during the rainy weather that there is plenty of food. If pests annoy them, or if they run out of food the bees simply fly

[1] 'Italianizing Indian Hives', *Asia*, June 1931.

away hoping for a more peaceful and abundant life in a new home.

My mother's bees which were always about during my boyhood in New York State were not migratory, but they were not beset with so many pests. There was no wax-moth which is such a frightful menace to uncared-for bees here; there was no king crow who sits close to the hive and eats many bees a day; there was no huge black and yellow bee which flies about in front of the hive all day killing large numbers of honey bees; there was no lizard who sits quietly inside just at the entrance and consumes a hundred bees a day; there was no ferocious ant which can tear the insides out of two or three bees at once while they try to carry him out of their hive. These pests make whole swarms of Indian bees move from place to place as their homes are invaded. A weekly inspection of all the frames, and a thorough cleaning of the inside crevices and bottom board of the hive will eliminate any such intruders before the bees get worried about them. Only the lazy bee-keeper has these pests now. Of course where ants are numerous it is necessary to stand the hives in water. At the weekly inspection during the rainy season, which is the hardest for bees in any country, the bee-keeper will discover if the honey stores run low. When they do he places a little sugar and water in a shallow tin on top of the frames inside the hive and the bees think their home the finest place in the world to stay until bright days and flowers come again.

The migratory difficulty successfully overcome, we turned our attention to changing the mind-set of one of the finest minds of God's creation—a mind so sensible that it makes the Indian bee say: 'What is the use of getting all excited over working? We do not have to lay up stores. The weather is always warm, there are always some flowers. We can dash out even between showers in the midst of the heaviest monsoon and likely find a few flowers with enough nectar to keep us going.'

It is with this set of mind that the Indian bees build

combs and start filling them with honey. But when the combs are about half full some bee says, 'Look here, bees, what is the use of all this hurry and work? Look at all the honey we've got; let's just loaf around home a while. We have plenty of honey to eat.'

So they stop or nearly stop working. Then another bee has an even brighter idea. 'Why not have a big banquet tonight and eat up all the honey?'

They have their banquet and the honey stores which the encouraged bee-keeper thinks will be sufficient to extract by the end of the week, disappear overnight. The banqueting habit is well known to our Indian hillmen who collect wild honey. They know that stores of honey disappear overnight and say certain phases of the moon make the bees drink honey.

The scientific mind of the bee-keeper had to prove as good as that of the sensible, banqueting bees, or there was little chance of these small-producing bees ever becoming a profitable cottage industry for the hungry Indian villager. The method by which our bees are now made to work like Italian, English or American bees, producing surplus honey for sale, is very simple. It involves two principles: using the combs over and over again, and extracting often.

In the primitive method of squeezing the combs to get the honey, the combs or storage cells were ruined and before the bees could begin to gather more honey they had to make new combs. According to the best authorities it requires six or seven pounds [1] of honey to make one pound of wax comb. By the modern method of extracting by gently whirling the comb in a small extractor, such as we make at Martandam for five rupees each, the combs are unharmed and can be placed in the hives again. What a saving in time and labour for the bees! All they have to do is to begin to refill the combs. The tedious task of comb building need be done but once so the bees multiply their output.

[1] See A. I. & E. R., Root, *ABC & XYZ of Bee Culture*, p. 750.

A further increase in production results from one simple method of making the bees work harder and continuously. We cannot wait as we do in the West for the combs to be full, as I have explained. It is necessary for the bee-keeper to keep ahead of the bees. If he finds at his weekly examination that the combs are a little over half full he at once extracts all the honey from the super, putting the combs one by one into the extractor, whirling the honey all out, and returning them to the hive empty. Now the same bees who have started to loaf and have planned to banquet, call out excitedly :

'Why we have no extra honey at all ! Come, we must quickly collect more.'

The mind-set of the Indian bee has been changed. When we have made them conscious of the need of working, they can do work faster than the western bees. I found this out when soon after I brought the 150,000 Italian bees to Travancore, they were attacked by myriads of *Apis indica.* From all around unbelievable numbers came, bent on robbery and seemingly resenting the invasion of the foreign bees. They stormed the portals of the larger new hives. Fortunately I was present. Big Italian bees would come out of their hives each with two or three small Indian bees on its back. In this terrific battle, I saw how the Indian bees had great advantage because they were so much quicker in their movements. This quickness helps toward greater production when we instil the idea of industry into the mind, will, and plan of the Indian bee.

The results from handling the bees, as I have described, has expelled all doubts whether bee-keeping with *Apis indica* is profitable. While I am glad the Travancore Government are trying one more experiment with Italian and Carniolan bees, bringing several colonies just now from Australia, there is no longer any question that bee-keeping is a successful cottage industry even with *Apis indica.* Recently we surveyed 319 families—not by any means all of the bee-keepers in the Martandam villages—who have joined the one man with one hive whom we found when

we began our teaching. These families owned 1,096 hives. They had made 4,304 pounds of honey to sell during the year. This meant an increased income for these 319 poor families of over Rs 3,000. It should be kept in mind that this is all extra money. This income from bee-keeping, as from poultry-keeping and from other new cottage industries, in no way diminished the income they previously had from other sources.

Sometimes the bee-keepers are able to save this extra money. We took the members of the World's Rural Conference to visit P. Sundaram and his wife who live beyond mud walls over which we had to climb, in the village of Kaliakavila. They own thirty-five swarms of bees. He has adopted another cottage industry practised by several bee-keepers—that of building hives to sell to his neighbours. They sell honey through the Martandam Centre as well as directly to customers sometimes as far away as Bombay. Mrs Sundaram takes great interest in the bee-keeping. Sundaram said they had been able to save Rs 170 from the extra money they had made on their bee-keeping last year.

Another day I was showing our National General Secretary around some of our rural Associations near Chepad, about a hundred miles from Martandam. We were near the home of Daniel, a young farmer who had taken a short course in Cottage Industries at Martandam. He very proudly brought out a handsome new bicycle, telling us in Malayalam, 'I bought this with money I got from the honey my bees made.'

Dewan Bahadur V. S. Subramonia Iyer, former Dewan of Travancore, speaking at our last Rural Service Exhibition and referring to the large display of honey brought in by the villagers said: 'It has been thought a great thing to make two spears of grass grow where one grew before. What shall we say of having made these villages flow with honey where there was no honey before?'

Some of the villagers show almost unexpected ingenuity in labelling their honey. I remember going to Madras to

work out with the best printers the design and colouring of our Martandam honey label. The villagers now draw their own designs and make the blocks right in their villages. Their neatly labelled honey looks very attractive as it sells in sales depots and exhibitions alongside Martandam honey.

When honey is taken unripened, that is before the combs are fully filled and capped, *it simply must be artificially ripened or cured.* I do not admit that Indian honey is inferior to honey from England, America, Italy, or New Zealand. I do admit that it is different as it naturally would be since it comes from different flowers. There are three reasons why Europeans sometimes say that Indian honey is inferior: first, they have in mind the home honey taste which is different; second, since the honey they get is usually that robbed by hillmen and squeezed, brood and all through some old dirty rag, it is thin unripe honey taken when combs are partly filled; third, they find it slightly sour. The reason the honey tastes sour is because it has fermented. This unripened honey is bound to be thin because, in any country, nectar from flowers contains an excess amount of water. I quote this striking statement from our best authority. 'Some nectars have a water content as high as eighty per cent. If this is the case, to obtain a hundred pounds of honey, which would contain about twenty pounds of water in the final product, the original nectar would weigh four hundred pounds, which would consist of eighty pounds of sugar and three hundred and twenty pounds of water. Of this vast amount of water, three hundred pounds must be eliminated before the honey is ripe, or three times the weight of the resulting honey.

'To transform water into water vapour requires a large amount of heat, namely, 535.9 small calories per gram of water, or enough to raise the temperature of the gram of water 535.9 degrees Centigrade. To evaporate the three hundred pounds of water mentioned above would then require 72923.664 large calories. On the assumption that the sole source of these heat calories is the food of the bees,

it would require the consumption of over forty-nine pounds of honey to evaporate this water. It is evident that the bees must under some circumstances consume large amounts of honey to obtain the energy necessary for the evaporation of the excess water in nectar. This in turn causes the necessity for gathering more nectar to take the place of the honey consumed in this process. If it were not true that the external heat assists the bees greatly in this elimination of water, the honey crop would in some cases be greatly reduced.

'The evaporation of the surplus water in nectar is one of the most interesting things in the hive behaviour of the bees. There are still many undetermined points regarding this course of behaviour but generally the returning field bee does little toward this ripening but deposits her load in the first convenient place. This may be in the mouth of a young hive bee, in a cell of the brood-nest, even one containing an egg or a young larva, or even on the bottom-bar of the brood-frame. From this point on, the ripening process probably depends on the work of the younger hive bees. They move it from place to place, often with no apparent purpose, but the outcome of their work is that the thin nectar is placed in cells so as to expose as much surface as possible, thus aiding evaporation. Evaporation is also increased in proportion to the movement of air over the exposed surface of the liquid, and bees fan currents of air through the hive, even though it may be several stories high, and thus hasten evaporation. How this fanning becomes regular, in on one side and out on the other side of the entrance, is still one of the mysteries of bee life. Several investigators have studied the number of bees engaged in fanning at the entrance, and find that this number is in close relation to the amount of evaporation going on within the hive, so that it is evident that, in the marvellous division of labour within the colony, about the right number assume this task.'[1]

'*How do you insure first-class Martandam honey?*' is

[1] A. I. & E. R., Root, *ABC & XYZ of Bee Culture*, p. 747.

a question often asked. We employ Chellappa, a young, active, ex-high school boy, another of the many boys who during rural high school days learned about all the things we teach in our Centre which is adjacent to the school. He was a successful boy bee-keeper at his home, and then showed his honey and bees at the exhibitions. Now he is paid Rs 12 a month to work among the bee-keepers in the various villages. We do not yet quite trust the villagers in matters which require absolute cleanliness. We do not put our label on any honey which Chellappa, or another member of our staff, does not see extracted, cured and bottled. Chellappa says to the bee-keepers of a village, 'Let all extract honey on next Monday; I shall come early in the morning, bring our extractor (if the village Bee-keepers' Club or YMCA does not own one), and I shall help you extract. Any honey that you wish the Centre to help you sell, I shall take to the Centre to cure and bottle there. I shall help you here in the village with the curing and bottling of what you do not sell through the Centre.'

In this way Chellappa is continually teaching not only how to handle bees, but the curing and bottling of honey, all the fine art of preparation for sale, and cleanliness. He is continually pointing our wrong and careless practices. His small salary is met through profits in our bee-keeping department.

Back at the Centre the honey is 'cured' to the right consistency of thickness and moisture, by evaporation in a double boiler (one dish larger than the other with water in the larger and honey in the inside smaller one) over a Primus stove. The temperature of the honey is kept well below the boiling-point (about 150° Fahrenheit) until the required thickness is reached. If carefully watched, any temperature under boiling-point will not harm the honey, and the higher temperature will speed evaporation.

National Honey Week has just been celebrated in India for the second time. We expect this to become an annual event. We took the initiative in organizing last year the first National Honey Week because we felt such a celebration

would not only spread this useful home vocation but stimulate the use of honey as a food. It will be a comparatively easy task to make the consumption of honey in India keep pace with increased production as the vocation spreads. Honey has been our easiest product to sell. Never was a more fortunate stage set for the reception of a good product: every man, woman, and child in India is already very fond of honey but only a scattered few are accustomed to use it except by the drop as medicine. All we have to do is to educate India's millions to its unique *value as a food.* This we must do ahead of increase in production. We must not delay because the task is comparatively easy. As an educational institution, National Honey Week has been proclaimed for the first week in February each year.

This year a greater number of places over India, including several cities, celebrated Honey Week. The Dewan of Travancore, Sir C. P. Ramaswami Aiyar for the inauguration of the second Annual National Honey Week in the Martandam Area, wrote this message which interprets the purpose of the week: 'The use of honey as a natural and important food and the advantages of honey over cane sugar are becoming very well known and the work of the YMCA Rural Reconstruction Centre under the guidance of Dr Hatch has greatly facilitated the progress of bee-keeping in Travancore and has spread the knowledge of scientific bee-keeping in the State and outside. I wish all success to the National Honey Week and to the propaganda initiated at Martandam.'

As a suggestion for this celebration we gave all those in India, Burma, and Ceylon who have corresponded with us regarding bee-keeping during the past year, the story of the actual programme carried out in the various cities and villages of South Travancore last year. A typical programme began with a parade of bee-keepers accompanied by all the boys and girls of the village carrying banners advocating honey and bee-keeping. The parade was headed by a bullock-cart which carried tempting,

attractive, large supplies of honey and enthusiastic demonstrators. Special songs about honey were composed and sung in the procession. After the procession had aroused the interest of all people in the place, they led the crowd to the Centre, YMCA, market or other meeting-place, where for an hour actual out-door demonstrations of bee-keeping equipment, transferring bees to modern hives, extracting, curing, bottling and labelling of honey were carried on.

Later at the meeting the best scientists and leading medical officers told the audience of the food and medicinal values of honey; why the ancient Ayurvedic physicians of India rightly used it in the indigenous medicines and why modern physicians make it the base of many preparations; how certain common superstitions about it, such as that it causes constipation, are erroneous; how even diabetics can eat honey without fear; how honey can be eaten as a food in quantity with great gain; how it is superior to other sweets, being sugar in inert form which is easier to digest; how excellent it is in the diet of children; how delicious whenever a sweet is required on children's bread or even in coffee or tea. The leading physicians in Travancore State are most enthusiastic about honey as a food. In my boyhood we had honey on the table every mealtime; we ate honey daily and it was remarkable that none of us, father, mother, or children ever got tired of it.

In a few of the villages *The Buzz of the Bees* or similar dramas were staged.[1]

'*How do you get a wild colony of bees out of a hollow tree or hole in the ground or other cavity and put them into a modern hive ready for work?*' scores of people have asked me.

School children or coolies will generally find several wild swarms if they know we want them.

We can trace any bee to her home by the following method of *bee-hunting*. It takes some time like any form of hunting. It could be recommended as a diversion for

[1] Emily Gilchriest, Hatch, *Little Plays*.

the unemployed. All the equipment the bee-hunter needs is a small box with lid, or a drinking glass with a flat cover. In the box or glass, place a piece of honeycomb or a gauze-like cloth, and pour over it some honey diluted about fifty per cent with water. Full honey would make too heavy a load for the bees. Go near a wood or any place well away from an apiary, and look for bees taking nectar from flowers. Choose a bee that is collecting nectar and not one getting pollen, for the pollen gatherer will not be interested in your honey. Close the box or glass gently over a bee while she is taking nectar from a flower. She will be pleased to find the honey in the glass and will fill up with a load of it. Place the box on a post or stump and draw back the cover. The bee will come out, circle about, and start on a bee-line for her home. Sit down and wait until she comes back for another load. After one or two trips she will bring other bees to share the find. You can judge the distance the bees have to go to their home, for it takes about eight minutes for a bee to go half a mile and return.[1]

When you have a pretty good idea of the exact direction in which the bees go, gently close the lid when several bees are inside, walk toward a tree or some other marker along the bee-line, set the box down on another stump or fence, release the bees, await their return as before. Watch the direction they fly and note the decreasing time they take for the round trip. By shutting them in and walking to right angles some distance and releasing them you can establish a cross line and judge the position of the bee-tree or other home by the spot where these lines meet. If, as you proceed, the bees begin to fly in the opposite direction you will know that you have passed their home.

When found, every colony has to be diagnosed, for each will be in a different position and we have to decide how the colony can be got out and put into the hive. Let us suppose the bees are coming from a hole in a hollow tree. We first determine how far up inside the combs are and

[1] See Root, op. cit., pp. 82-4.

then cut a hole in the tree just above the combs. Into this hole we stuff cloth so as completely to shut off the cavity above. This is a wise precaution to prevent the queen and the other bees from crawling further up the hollow tree out of reach, when we begin to take out the combs.

Now we shall probably have to enlarge the hole by which the bees enter, making it large enough for the free passage of the hand and for the removal of the combs. We remove the combs one by one, cutting each one to fit into a frame of the brood chamber of the hive which has been kept ready nearby; we fit each comb into a frame, tie right round the comb and frame with a bit of string or with a strip of coconut fibre or tough grass. A few days later when the bees have fastened the combs to the frames with wax, these ties may be removed. Into some of the shallow super frames we tie any of the smaller combs and pieces which have been trimmed off. These serve as starters for the supers and encourage the bees to complete combs.

The hive is now ready for the bees, and we must decide how to get the bees, particularly the queen, into it. We try first by holding the hive close to the tree, just above the entrance and then direct some smoke through the hole we have cut above to make the bees move slowly down and out onto their own combs in the hive where they will feel quite at home. We carefully avoid getting any smoke into the hives as bees do not like smoke and would not then stay in the hive. As soon as the queen goes in, the other bees will quickly follow. It is difficult to find the queen amid the thousands of others but if she is spotted, shut into a match box and placed in the hive the bees will quickly go in. Sometimes the only way is to take the bees gently by handfuls and put them into the hive. When a lucky handful contains the queen the remaining bees will begin to swarm in of their own accord.

When taking the colonies from small cavities in earthen walls we first clear off the earth along the line of the entrance-hole or tunnel until the combs are exposed.

These are removed one by one as described above. When all the combs are out we place the hive close to the top edge of the cavity, if possible direct some smoke from the inner back side of the cavity to get the bees slowly to move out onto the combs in the hive. Bees in walls of houses, verandas, roofs, and other types of cavities can be hived in this way. We have hived hundreds of colonies of wild *Apis indica* by this method in our villages, and village bee-keepers do it by themselves whenever they discover a colony.

To those who write from so many parts of India, Burma, and Ceylon asking how to *get started in bee-keeping*, I advise first a search in their area for these wild colonies of *Apis indica*; and to rejoice if they are found in numbers. Our experience leads us to believe that chances are not good for bee-keeping where bees are not found in nature. When we started the Rural Reconstruction Centre for the Hyderabad Government at Pattancheru the Government was anxious that the Centre should quickly make a showing in bee-keeping. They encouraged Mr Stephen, an experienced and careful bee-keeper who was in charge of the Centre, to set up orderly, impressive, rows of painted hives even before he could have bees in all of them. Mr Stephen was not able to find colonies of bees anywhere around, and the bees he imported did not do well in that section of Hyderabad State.

The Baroda Government was just as eager to make bee-keeping a success and we tried from the Kosamba Centre to establish it. Not being able to find bees in the locality, several colonies were imported from Martandam. They have not done well at Kosamba. We have scouted different areas of Baroda State for wild colonies. I am advising that bee-keeping be established first in those remote hill or forest sections where wild colonies can be found, and in the city of Baroda where there are many honey-producing flowers in and around residences. There is no doubt about the possibilities of successful bee-keeping in the several parts of Ceylon where I have recently made

investigations. Government officers trained at Martandam are hopeful of making a success of *Apis indica* in Pudukkottai. The new Centre at Trichinopoly, with a Martandam trained man, is making a good start in bee-keeping. I see encouraging beginnings in Mysore, though as yet on a very small scale. Coimbatore and Martandam and Central Travancore are our most flourishing areas. It is especially interesting to know that Martandam area (now described as 'flowing with honey') was chosen for a Rural Reconstruction Centre because it was the most barren country where people were poorest. People honestly thought there were not enough flowers in these parts, but bee-keeping is prospering mostly on the natural flowers.

In any bee-keeping country anywhere in the world there is the need of supplementing natural flowers with others deliberately sown for bee pasturage. In New York State we sowed white clover for the first spring flow of honey, sweet clover for midsummer, and buckwheat for the final crop in the autumn. We were interested that there be plenty of bass-wood and chestnut, golden rod, and berry blossoms; and Mother planted many of the best honey producing annual flowers around the house every spring 'for the bees'.

The dainty antigonon creeper (Mexican Coral Vine, Bride's Tears or Mountain Rose) with its very beautiful, pink or white flowers is the plant which we have chosen to lead our campaign of *Beautifying and Sweetening the Villages.* Can your imagination vision the changing picture in these poor villages where there were no flowers, but where now over the mud walls and thatched roofs of each small house or hut, climbs this flowering vine spreading a radiance of beauty? There are generally no flowers in the villages, owing to the scarcity of water, lack of fencing against goats and cattle, the presence of insects and fungi, as well as ignorance, poverty, and no experience of such things of beauty in village life. It never occurred to the villager that it was possible for him to beautify his

home: that was a part of his hopeless apathy. For centuries his ancestors have had no flowers, they are outside his tradition. A visit to Kurumathur proves that these backward class people have a real appreciation for the antigonon flowers which add so much to their enjoyment. In the pretty setting between two thatched houses covered with antigonon in blossom, they will arrange an exhibition of their folk dances, or exhibit the mats and baskets made by the women, and show other improved products.

We are pushing this campaign by making antigonon easily available. A California catalogue quotes the price of one antigonon plant as '$1.00'. We put seeds bulbs and plants in abundance within reach of the very poorest; and we sell both bulbs and seeds at a low price to other people.[1] Dawning appreciation of beauty spreads, cheering village life; the bees always swarm about antigonon. To find an antigonon flower spray without bees on it would be proof of an area devoid of and unsuitable for bees. This is the best honey-producing plant possessing the quality, in Travancore, of blossoming and providing bee-pasturage every month in the year.

[1] Bulbs, Rs 2 per 100; As. 6 per dozen: seeds, As. 4 per packet.

CHAPTER XXI

MORE HOME VOCATIONS

RECENTLY Mrs F. E. James whose judgement of art and of quality is much respected, toured the whole length of Travancore to find specimens of industrial arts which she deemed good enough to display in an exhibition in Madras designed to show the very best that present-day India can produce. During the part of this search when I was with her she found only two things which she thought of sufficiently high quality—our *kuftgari*, and some gold-thread hand-woven cloth made in the village of Balaramapuram. Article after article she turned down as second-rate or poorer. This is an illustration of the general poor quality of Indian handicrafts. We have had and still have a long way to go in our fight for quality products which will be worthy of the best in our workmen, which will be saleable at more than a starvation price, which will lift us above competition with the ordinary middlemen in the market-place with their second- to fourth-rate articles.

Toleration of the second-rate is one of the most common and serious sins in India. While this persists, people must remain poor. We find little realization of what high quality means. Unless someone takes a strong hand in respect to any particular product the people and even their teachers seem content to go on year after year never perfecting it so that it will sell for a decent price, or reflect credit on themselves.

We are helping with several cottage vocations because a rural reconstruction scheme needs at least a dozen. Not all families or all members of families will like the same

cottage industry, and since they will and should begin each on a small scale, one is not enough to bring the increased income the family needs. All of our home vocations are suited to men and women. Some of them have reached a high quality, some are only started on the way. Some people have hardly believed there are a dozen cottage industries. The students in our last Training School named within a few minutes fifty-seven possible cottage industries suitable for villages.

Every product needs so much attention, so much experimentation, so much careful study and recording, and the rural reconstruction staff have such a comprehensive programme to attend to, that progress in improving products is often so slow as to be disheartening.

Baskets and Mats. To see an example of the efficacy of demanding quality come to Kurumathur, a backward class village, and examine the baskets they are making. So attractive are they that visitors sometimes buy their whole supply. When we first turned our attention to this backward village there was one girl who was making baskets so poor in quality that they would not sell. We showed her how to make saleable ones. The very next time I visited that village the women of eight families were making saleable baskets. A few sales at a decent price are a miraculous stimulus. They make attractive mats also and have enthusiastically begun to spin coir yarn. We are now teaching these women of Kurumathur how to make the flat purse-like baskets which are so useful for many purposes and which are convenient for purchasers to carry away, to pack in their travelling trunks, or even to send by post to foreign countries. Formerly we bought this type of basket from Mohammedan women but they were at such a distance and so conservative we could not bring them into other benefits of Rural Reconstruction and we are never content simply to help economically. Kurumathur enjoys many features of the comprehensive programme.

Thread and Rope. 'Follow as far as possible the felt needs and expressed desires of the people rather than try to introduce things for which as yet they do not ask' is one of our proved principles. There are more palmyra palms than coconut palms in the Martandam area. This very fact has caused the coconut products to be somewhat neglected and less well handled than further north where coconut products are a main source of income. The people of Kurumathur village in their dawning progressiveness sensed the need of learning how to make coir yarn and rope locally and felt they could make this another cottage industry. Two visitors, Sir Baron Jayatileka, Chief Minister of Ceylon, and Mr Frank V. Slack of New York, were so impressed with the idea that they left money for the large spinning wheels needed for making the coconut fibre yarn. The villagers prepared soak-pits for the husks, and on my last visit I found them already spinning. This *charka* for spinning coir is an example of the simple type of equipment which even the people of backward villages can quickly understand, operate, and take care of.

Hand Weaving continues to be a paying subsidiary cottage industry and we should like to see a loom in every rural house for spare time and for spare—unemployed—members of the family. I have examined weaving institutions and schools as I have travelled over India and Ceylon and everywhere I see too expensive looms being demonstrated. A loom costing from Rs 40 to Rs 100 is not within the reach of the average villager, and the demonstrating of such expensive looms is obviously one of the main reasons why more homes have not procured them.

Pit looms with fly-shuttles can be installed at approximately one half the cost of full-height looms. The operator sits level with the floor with his feet in a pit, so that only a low framework is required. The pit looms are capable of doing just as fine work, and are more easily accommodated in a rural house which is often low and small. All teaching institutions should demonstrate both types.

Our greatest help to the weavers has been in showing

them what kind of cloth would sell. In our last Training School, when lecturing to the class on this subject, I said:

'Too many people weave *mundoos*.'

A Government school teacher arose and said, 'I do not think weaving is a successful cottage industry. I put in four looms and have lost considerable money because I can't sell my cloth.'

'What kind of cloth do you weave?'

'*Mundoos*.'

The class shouted with laughter. No wonder he lost money. The market was flooded with *mundoos*. If they exercise a little ingenuity and exert a little energy, our Centres can sell quantities of towels of very many types, girl guide *saris*, shirting, curtains, table covers, bed covers, sheets, provided they are well woven with fast colour yarns.

A manager in charge of a hand weaving department and school seemed satisfied with poor quality, bolstering his satisfaction with the remark, 'Fast colour does not mean entirely fast.' He will have to learn that 'fast colour' means colours which will not run or fade from washing, boiling, sun, or other conditions which cloth is subjected to. He will have to find it out very soon, or those who weave cloth with fast colours will capture his buyers whom he might have kept. Cloth buyers want quality: why should they not demand it?

All the processes of preparing, sizing, dyeing, and bleaching yarn can be performed at a Rural Centre, as are done at Paraniyam. When yarn is not bleached before weaving, we insist on the cloth being bleached before it is put on the market. It looks more attractive when bleached, and the bleached towels show their absorbent qualities better.

Palmyra Sugar. We are still in the process of perfecting palmyra sugar for its various possible uses.

Come down a long steep winding foot-path to the rural home of Mr Moses, an Irenepuram Village School teacher and watch Mrs Moses make us some sugar. The sap has first been brought down by a climber from the tops of

several of the trees which form almost a forest here amongst the blackened granite boulders. It is hot near the stove in the little half-open kitchen at the side of the small, unroofed, inner court of the house, but Mrs Moses does not mind and we must go close to see the thickening syrup nearly at the sugaring-off stage over the fire. She tests it often for the precise moment, then lifts the earthen pot from the fire and carries it to the courtyard where she ladles it into neat wooden moulds of the type we have taught villagers to make and use. Each mould is lined with a clean strip of palmyra leaf so that the cake can be removed when hardened. The sugar, a rich light brown colour, quickly cools and hardens. After a taste it is easy to understand why we recommend this sugar for all the uses to which white sugar is put: for after-dinner sweets cut into pieces just as it is, for icings, flavouring in cakes, ice-cream, puddings, in coffee, and in tea.

As a contrast come along to the jaggery section of the Kaliakavila market on the roadside just south of the main market. Is it possible that that black stuff covered with dust and flies is jaggery which people eat? Since this stuff is called jaggery, this filthy black mess, we do not want to call the clean attractive product made by Mrs Moses by the same name. Although both are made from the sap of the palmyra palm, they are totally different products: one is filthy jaggery, the other is clean palmyra sugar.

The villagers who prepare the ordinary sugar jaggery must always suffer the penalty of low price because it is not fit to eat, and has to be refined before use. Palmyra sugar brings a good price at once because it is a quality product.

There are several sections of India where there are many palmyra palms not tapped at all. In some places they are tapped for intoxicating liquor. In Rajpipla State I know an Indian Christian whose conscience would not let him sell juice to the drink shops so he did not tap his trees at all, losing all the income. When I am in Baroda and travel on His Highness the Gaekwar's narrow gauge branch



MAKING BASKETS AT KURUMATHUR

railways which instead of cart roads take us to the villages, I am sorry to see the long lines and groves of palmyra palms untapped. I am trying to assist in bringing them into usefulness. Sir Alexander Tottenham, Administrator of Pudukkottai State was concerned that the palmyras in that State were unfruitful for the people did not know how to tap the trees and make sugar. Last year the Pudukkottai Government sent four officers for apprenticeship with us. These men studied sugar-making and the Development Officer, Mr G. Venketeswaran, won a prize at the Rural Service Exhibition for palmyra sugar he made himself. I hope they will bring those Pudukkottai palmyras into fruitfulness.

Pappadams. Clean, safe food is a worthy aim. Picture a narrow path down which thousands of people go to attend the meetings of a large Christian Convention. Picture the most horribly deformed beggar-lepers in the last stages of the disease lined up by their able-bodied managers close to the path where people must walk. Picture a break of several feet in the line of lepers and in this space a woman making pappadams! All the thousands, and there may be 30,000 by the end of the week, attending the convention will eat pappadams daily with their curry and rice. Many will eat them in the several temporary restaurants not far from the lepers. Many will eat the pappadams made by this woman. Hastily she makes hundreds of pappadams for sale, and she spreads the flat, circular food morsels on the filthy disease infected ground about her to dry.

Pappadams are probably one of the dirtiest staple items of the Indian diet. Only well-to-do families can afford to have them made at home under supervision. Nearly all Europeans in India eat pappadams regularly with their rice and curry course, pappadams their cooks buy in the open markets and bazaars. They are not always made as dangerously as I have seen them as pictured above, but all of us see them being dried in all sorts of filthy places along the roads and streets, sometimes walked over by

mangy dogs, sometimes exposed to the dust of a crowded bazaar. Unless we know where pappadams are made we can be reasonably sure they are not fit to eat. 'But we always fry them well,' said a European doctor's wife one day to my wife. 'True, but I do not relish filth even if it is fried,' came her reply. An Indian lady-doctor has just told me she never eats pappadams any more for she cannot have them made at home and bazaar ones are too dirty.

We have established the Martandam pappadam supply service. In one village we have eleven families willing to make clean, delicious pappadams under our supervision in a specially constructed, protected, clean shed, with a washable floor.

By our twice weekly service fresh pappadams are sent out with other products on each shipping day to regular customers who place standing orders. They cost only five annas for a hundred plus carriage. We are equipped to fill orders anywhere in India or beyond.

Clean Tamarind. Another general article of food is tamarind used in curry preparations. The sticky reddish substance can be seen lying on the ground in rural markets all the time collecting more and more dirt that never can be removed. This I know is repulsive to all families who care for clean food.

We felt there was a need for us to supervise the gathering of the pods from the trees, preparing the tamarind, and packing it in tight wooden boxes for sale. So far this clean tamarind has not sold as well as we expected. As with other improved foods there is the persistent refusal of so many Indian housewives to pay a fraction of an anna more for freshness, cleanliness, or quality. Well-to-do families who care for clean food prepare the tamarind for themselves in their own homes and do not use the dirty stuff from the market. The rise to the general use of quality food must come through a process of education. It will not be accomplished overnight.

Pineapples. Gardening is a cottage vocation possible, in

at least some small way, to almost every rural family, but very few do any decent gardening. A Rural Reconstruction Centre is seriously neglecting its opportunity, if it does not have a good nursery to supply improved varieties of plants to the villagers. Two improved varieties of pineapples are among the plants distributed from Martandam. One variety grows large, up to thirteen pounds, is deliciously juicy and sweet; the other variety is much smaller, crisper, finer grained, and very sweet but not so juicy. It is interesting that about an equal number of customers have preference for one or the other. These beautiful pineapples grow now in an area where the people actually did not know they had all the conditions for growing the very best. Only small ones grew by chance in the hedgerows, absolutely uncultivated. Slightly to the north and nearer the malarial foothills where the rainfall is higher, they grow better than actually in Martandam. They grow well in nearly all parts of the State and even in the hills up to 3,500 feet. Experiments carried out by our friends at the Ramakrishna Mission Mutt near Trivandrum indicate that pineapples, which generally ripen in two seasons separated by several months, will ripen every month in the year if some are planted every month.

The growth and sale of these delicious pineapples through the Centre is meaning much to some of the poorest villages. Dr Victor Heiser of the Rockefeller Foundation said to me when I last met him in New York, 'The greatest loss in those tropical countries, is from the absence of provision to take care of surpluses.' In all western countries, some of our first recollections include a variety of ways in which the surpluses of the fruiting seasons were saved up for the barren months: canning of fruits, jams, jellies, and vegetables; preserving eggs in water glass or lime solution; meats in salt brine; hay and grains stored away in barns; green fodders, chopped and packed in silos. To help preserve this surplus in pineapples and other fruits I have brought out a Max Ams Canning Machine. We turn it easily by hand, and seam tins of different sizes. We

have learned to solder seams when necessary. We have a large pressure cooker to help in the processing. We are also experimenting with the making and bottling of pineapple juice and tinning pineapple jam.

This tinning requires much study and experimentation, but we hope to develop it.

Cashew Nuts. The simple mail order business for marketing the finest selected cashew nuts, mostly in India, continues to be profitable to the women who prepare them and who formerly had to stand in the hot dusty road near the bus stops trying to sell them by handfuls. They have joined a simple kind of co-operative which sells the nuts through the Martandam Centre. The nuts are sorted, packed, and sent out by post all over India. The payment comes back right into the little Martandam post office. Even poor country women can understand this simple process.

Owing to the great increase in demand for this nut, especially from America, there is a real epidemic of starting 'cashew nut factories' in Travancore. Agents of these factories scour the villages trying to buy all the nuts at the lowest price as soon as they are harvested. This takes away the steady income from those women who have earned their living from collecting and preparing nuts for local sale. Except at harvest time they have great difficulty in finding nuts, even when orders come. Paraniyam Centre has just started its own small marketing fund for cashew nuts.

While I was investigating schemes for Rural Reconstruction in Ceylon, I came across a useful example of roadside-marketing—a system in vogue in America. On the road about midway between Colombo and Kandy we found organized roadside-selling of cashew nuts. At intervals of about one hundred yards small thatched bamboo huts afforded the sales-lady and her cashew nuts protection in case of rain. In front of each little hut was a table piled with nuts. In attendance was a neatly dressed sales-lady. Each girl I was told, represented a family. Other members of the family collected and prepared the cashews for sale.

So attractive was the whole arrangement that everyone was inclined to stop and buy. This roadside-selling idea should be helpful in many rural places.

Palmyra Umbrellas. The real farm labourer had some ingenuity some time for he invented for himself a leaf umbrella which would sit on his head like a hat and leave his hands free for work. It was really an umbrella-hat. He made also non-collapsible leaf umbrellas with bamboo handles.

We are now persuading them to make bigger umbrellas six or eight feet in breadth suitable for lawn and beach purposes with strong bamboo handles which can be set in sockets in the ground. It sounds simple, but is it? Like the long months of struggle we had to get bamboo basket makers to change their traditional baskets a bit to suit our marketing of eggs and other products, we have had and are having a real struggle to get these leaf umbrellas enlarged. The wider spread needs much stronger braces and underweaving. We are perfecting these umbrellas trying some hardy varnish over the top to increase durability. They are appealingly quaint on lawn or beach.

Fortunately these huge umbrellas can be transported by train without crating. I tried to put one on my car to take to a place 300 miles distant. I could not tie it on in any way. Without much hope, I put an address on it and sent it with the gardener to the railway station. I could hardly believe my eyes when back he came swinging the yellow booking receipt. He had sent it by parcel for only seven annas. 'But the parcel clerk no not like this. He say it fill whole van and he can send no anything more on this train.'

The umbrella arrived in good condition. We hoped the coolie who delivered it appreciated the picture he created as he carried it down the road—a small frog under a huge mushroom!

Kuftgari. I do not agree with histories of Indian art which insist that the possibilities of great art have passed with the ages and that potential artists are no longer born

in India. The artists and craftsmen of old India generally were encouraged by rajas and others so that they worked with a will taking time to put into their creations their very best. I want our rural reconstruction movement, in a different way of course, to give some encouragement to these present-day expert craftsmen whom God has endowed with creative gifts. *Kuftgari*, silver pounded into iron, was listed among the dying arts in Travancore. A little encouragement is all that was needed to revive it.

I marvel at how our *kuftgari* craftsmen can listen to our descriptions of a design, sit down and immediately draw the design on a bit of paper, then, with only a few primitive tools, fashion the new sheet iron into the desired shape, and set into minute hatchings our design in silver—marvellously, beautifully. The silver will never come out. It can withstand future ages.

But only the old men can produce the best *kuftgari*. They do it for love of the work; the younger men do tawdry things for the tourist; and all of them make plates, boxes, and picture frames—not desirable enough objects to be saleable in any numbers. There are not many *kuftgari* workers left. We are inducing them to make more useful articles and helping them with selling. *Kuftgari* cuff-links and pendants sell readily. We want all our projects to be permanently helpful, growing and increasing long after we have gone. But what a time we have had trying to get the expert old man to teach his son or other young men. As gentle as possible we point out that he is really very old. We want him to teach some younger men to do the beautiful designing and high quality of work that he can do. It is almost useless; he refuses to see our longtime plan. Whenever we urge him he says over and over again naively: 'Do not worry. I will work very hard and fast; I will work nights. I can take care of all orders. No one but me can do good work. No one can learn.' There are ways and means. Since he needs our help in marketing, economic pressure can be brought to bear and we are getting some teaching done. A few

young workers are becoming fairly proficient. 'Your *kuftgari* work was greatly admired and readily sold,' wrote Mrs James after her exhibition. Good *kuftgari* is, but only the highest quality will command praise.

Sea Shells. Boys and girls have a large part in our cottage industries. The next few I describe are peculiarly theirs. Grit must be given to fowls to help them grind their food and supply eggs and to increase the number of eggs. Sea or oyster shell is one of the best grits and the most common commercial one.

Whenever I walk on our shores I gather small sea shells to take to my little girl. Numerous boys follow me and soon notice that for some reason I like shells. They at once begin collecting and in no time I am deluged with handfuls of them. This is how I got the idea. What an excellent boys' work project.

The Boys' Work Secretary directs the boys near different seaside villages along our coast to collect shells and pays them. The shells have to be broken up to convenient sizes for the hens to eat. This is done by some in their homes as a cottage industry and by others at the Rural Centre. The Centre has added 'Oyster shell for fowls' to its sales list and ships the product to poultry-keepers.

There are shells and shells. They differ at various places along the sea coast. Too thin shells are not good; they must be from one-eighth to one-quarter inch in thickness. We had to find the best places for collecting, and train the Boys' Secretary and the boys to prepare a first grade product which will bring a good price.

Fans. There is the double negative Malayalam proverb, 'No part of the coconut palm is not useful.' The same applies to the palmyra palm. I have written of the palmyra sugar. Another project is the manufacture of fans.

The whole leaf trimmed and bound with its own stem for a handle cannot be excelled on the hottest day in any country as a breeze-producer. We are now making folding fans, in full or half-circle shapes.

They cut palmyra leaves neatly and artistically into narrow strips; superimpose one strip partially onto another; sew them with neat threads; and support them with wooden handles. The fans are most attractive and useful. Like so many other handicrafts this one languished in a second-rate-quality-and-finish stage until we recently found time to give enough attention to it and demand that the fans be perfected. They are now really attractive and have every chance of selling in large numbers.

Christmas Cards and Gift Cards. Too seldom do we find any inventiveness. One of our constant regrets is that our rural staff or village leaders never seem to originate an idea. The Christmas cards are an encouraging exception. Dasiah and his boys worked with their own idea of making Christmas cards from the leaves of the palmyra. They had to climb to the tops of the highest trees for only in the very largest leaves is the distance between the ribs wide enough for a card. The first card was tied with a cheap ribbon of such a lurid hue that it entirely blasted all chances of sales.

'Why not tie it with a local product?' I asked. 'Why not try a strip of the same leaf, or of screw pine, of kora grass, dyed by the villagers in some attractive colour?'

The improvement was gratifying. Last Christmas they sent a large shipment to Denmark and had quite a sale in India. They are now booking orders for next Christmas, some to America.

The boys are busy perfecting an idea given them by a Scotsman friend: a palmyra leaf gift card to tie onto parcels. Millions of gift cards are used in various countries of the world but as yet no palmyra ones. Our palmyra cards carry a statement of how ancient manuscripts were always written with a stylus on palm leaves and a few words actually written with a stylus.

Lacquer. Our Boys Department have started to make lacquered articles, such as candlesticks, boxes, games and toys. They begin with the rough wood; hew or turn out pieces to the required size, smoothness, and shape; then

apply the lacquer by whirling the wood rapidly enough to melt the lacquer by friction. This vocation has some commercial possibilities and is further valuable because it teaches young people to use tools. Since village people generally have no experience with any tools—not even the hammer and the saw—it is not difficult to realize what a valuable step it would be to bring about the general use of tools.

Fret Work. The use of fret saws is another handicraft given to the boys. They take to it keenly. We try to avoid their making the usual bad-taste and dust-collecting bric-a-brac to which the fret saw is conducive. Although we look upon this as only a beginning which will lead to more substantial work, our boys' leaders have turned out some very useful things: household articles, letters and designs for sign boards and jig-saw puzzles which are so delightful a diversion for young and old. We hope this will lead to the general use of more substantial tools like the saw, plane, and hammer.

Paddle Tennis. The Martandam Centre is an exponent of paddle tennis, a new game which is becoming increasingly popular. It is especially suited to rural parts and rough and rainy hill areas, but is just as much fun in towns and cities. The rules of play are exactly the same as for lawn tennis but the space required is smaller. The court does not require as smooth a surface as a regular tennis court nor careful and expensive maintenance, and play can continue right through the monsoon rains.

Any net similar to a lawn tennis net may be used. Net making for volley ball, tennis and paddle tennis has become a cottage industry. The paddles are made of wood, very durable and inexpensive. The special paddle tennis ball of semi-solid rubber is not available in India. We play with used tennis balls. New tennis balls are too active and of course expensive for villages.[1]

[1] Full paddle tennis sets comprised of 4 bats, a net, 4 used tennis balls, printed rules, are supplied from Martandam at Rs 7-8.

Paddle tennis is an ideal rural reconstruction game, within the reach of limited funds and limited play space. It is enjoyed by boys and girls and by adults as lawn tennis is enjoyed. Planters in our hills where rainfall is so heavy, have found this game a boon not only for themselves but for their Indian employees whom they desire to keep happy and give recreation after working hours.

Boys and Girls in Industries. Boys and girls especially those who come walking barefooted from miles around to the rural high school just over the mud wall from the Centre, find all these vocations going on there very fascinating. They are often interested sooner than adults and begin to practise some of these self-help activities before their parents do. Many parents have been brought into the rural reconstruction programme by their children.

We feel we must encourage and help all these boys and girls. One of Dasiah's responsibilities is to keep in touch with everyone of them. He carries in his pocket all the time a book with the names and addresses of the boys and girls, so that whenever he is near their homes, he can stop in to see them and give his intimate, expert guidance. It is fitting that these boys and girls who are making such a priceless contribution to the spread of beneficial home industries should have the final word of this chapter.

CHAPTER XXII

CLEANER LIVING

WHAT is the excuse any more in most parts of India for living in rural places in houses crowded on top of each other like slum dwellers in a big city ? Are there dangers of sudden invasion ? Is there need of mass defence ?

The beginning of a revolutionary change is occurring in connexion with the rural reconstruction programme in the extension field of the Kosamba Centre in Baroda State. A majority of the people about there live in the usual congested Indian villages where insanitation is such that anyone used to clean living could not be happy there one single night.

Out in the rural areas there was plenty of good open land owned by persons who lived in these dirty villages. These owners leased their land to renters or left them to caretakers. Neither the renters nor the caretakers looked after the lands well and income was, therefore, small. Naturally owners were not interested in the land which brought such small returns nor was the land ever properly developed.

From Congested Filth to Spacious Living. The Centre Secretary began to talk with these absentee landowners. He pictured to them the possibilities of improving and making full use of their land : how they could easily dig wells, water the land and use manure, and how with proper cultivation of improved seeds, they could get a splendid crop. He pointed out what a perfect place it would be for keeping some of the improved poultry demonstrated at the Centre. He explained that healthy, interesting, profitable,

and satisfying living awaited them on their own land. A few years later he took Mrs Hatch to visit some of these owner-cultivated farms. She tells the story.

'Our Dunlop cart—I don't think the bulls appreciated these rubber wheels more than we did—turned in under the imposing signboard *The Gaekwar Diamond Jubilee Rural Farm.* I had my doubts about the jubilance of such a farm! I saw a shack with one or two rooms enclosed, partly in chicken wire. I heard some shouting and splashing noises. I was wondering just why I had been brought to this place when the owner of the farm appeared. And then I knew. He greeted Mr Souri with obvious affection, his eyes shone with a happiness of living, his voice rang with a healthy pride as he welcomed me.

'"I am proud indeed to show Mrs Hatch my farm." He smiled understandingly. "Of course, there isn't much to show now for I am just beginning. You are thinking my house looks more like a hen run, I am sure. Well, this was quickly put up, it is sufficient for me and my servant, it is open to all the fresh air which is one thing I want."

'As we walked about the vegetable garden, watching the chickens and ducks, the cow and her calf, and the building of the well, I too began to smile. With my host, I saw a permanent well-built home, a lawn and flowers; I saw a big vegetable garden verdant with the best varieties; I saw the fowl runs and the cattle sheds; and beyond for acres on all sides I saw the fields waving with luxuriant growth; and best of all I saw a family living a clean outdoor life, healthy and happy in the midst of their own possessions.

'"How did you happen to come out here?"

'"Mr Souri aroused my enthusiasm and my curiosity. I came out here a year ago. I shall never go back."

'"What did you do before you came here?"

'He smiled, "Just what most of my friends are doing now. Sitting in yonder dirty, stuffy, village doing nothing. All day I would wander from home to the bazaar, to the teashop where we would play cards, drink tea, smoke, talk,

and just sit. I did nothing worth doing. This land was rented and I was satisfied with that."

'"Will your family come here?"

'"After a while they will come. Just yet they do not wish to live so far away without their neighbours. They will come. . . . Look at my well here."

'Slop. Splash. Up came the buckets full of muddy water. Tirelessly the bullocks walked to and fro pulling up bucket after bucket. Deeper and deeper sank the well.

'"I am having a pukka well. It will cost a few hundred rupees but I shall have a permanent structure and a sufficient supply of water the year around so that my lands can be well watered. Look at the field out there. I have only begun. I have given only the least cultivation, yet that field is producing more than I have ever seen a field produce."

'The field certainly was a contrast to those renter-worked fields beyond. I caught my host's enthusiasm.

'"Over there I am trying an experiment. Everyday I learn something new. My life is full of interest now and I have so much to do, so much I want to do. . . No, I cannot go back to my village. My skin does not like the feel of the air there."

'Splash. Slush. Slop. . . Adam Dawoodji looked out over the acres: his own coming into full yield; beyond, half-cultivated, neglected fields; far beyond, the rich green fields of another adventurer who was daring to break with tradition, daring to work with his hands, daring to turn his intelligence toward a right and profitable cultivation. Adam Dawoodji was silent. . . After a time his racing thoughts took words.

'"One by one they will come. In twenty years yonder village will be deserted of its landowners. All these fields will be green. Children will be happier and healthier. Let it be so. It is well."

'And in my heart I echoed, "Let it be so. It is well."'

Later when we visited the farms of such courageous men we were struck with the evidence that they were the most

enthusiastic, contented, and happy people we saw in all that region. As we went from congested village to congested village, other dwellers told us, 'I have land and I am making preparation to move out onto it.'

This ought to happen throughout India, and it will indeed be a revolution in an upward direction. It will bring full-time employment, full use of the land, more food, more abundant and cleaner living. Fortunately in Travancore we already have, to a large extent, this scattered housing. Although every rural person will tell us to what village he belongs, and the people think in terms of villages, the houses are so spread out that we often look about for the village when we are in the midst of it. In some villages there is congestion in certain sections such as 'caste streets', but in general we do not have much of it.

Investigators, especially rural workers from other parts, say, 'You cannot realize the advantages this gives you in many particulars of the rural programme.' They see at once how much easier it is to teach and accomplish sanitation. There is room at every house for the bore-hole latrine. If a family wishes to take up better practices or ways of living, there is ample room for them to do so, whether their neighbours do or not. There is not the backward pull which always comes from other houses when they are crowded upon each other. The difficulties of improving all kinds of livestock are diminished. If houses are at a distance any farmer who takes one of our White Leghorn circuit cocks in place of his mongrel cock, can have his hens bred by that cock, even though he has no confining runs, and he will soon have improved chickens. In the congested village, arrangement with a single family does not protect that family's flock from visitation and breeding by all the mongrel cocks of the village. It is essentially the same with improved bulls and bucks for breeding up the cattle and goats.

When a fearful epidemic sweeps down upon the congested village, what chance has any family to protect itself? Isolated houses in the rural areas can keep away

from an epidemic when it visits the area. When cholera came to our congested seaside villages near Martandam last year, all the families fled in all directions spreading the disease as they went. Nothing frightens people like cholera. The families in our sparsely spread villages stayed at home, for if they had their own wells and were sufficiently careful, they knew they had nothing to fear.

This argument holds equally true of animal and fowl diseases. Fowl cholera in a congested village will kill off all the fowls in a few days whereas all that the isolated family has to do is to refrain from bringing new birds home during the time of epidemic.

The Best Method of Rural Sanitation

In this country, where the ground is so filthy because of lack of latrines, where disease is being bred by this filth seeping into the water supplies, and by people walking barefooted over the dirty ground from which hookworms crawl through the tender skin between their toes into their blood streams to multiply and impoverish their blood, the problem of a proper, cheap, sanitary arrangements has brought us more questions than any other subject. Sometime ago I wrote a series of weekly articles on Rural Reconstruction, for *The Madras Mail*. The two articles on 'The Bore-hole Latrine' brought forth more comments and more inquiries than any of the other articles. To answer these many inquiries, I am going to tell here the reasons why such latrines are suitable and how to construct them.

The bore-hole latrine is cheap to construct. Our Centre's own borers cost from Rs 50 to Rs 100, complete with extension rods to bore as deep as twenty feet. They may be purchased from several places in India though so far I have brought ours from America. We loan these to the villagers who do their own boring. Depending on the softness of the soil three or four men bore a hole in a day or two. We require those who would accept the loan of a borer, to cover the top of the hole with a proper slab. We

make these slabs out of the granite rocks in the area. They cost from eight annas to one rupee each. Dr W. P. Jacocks, Director of the Rockefeller Foundation Health Work in India, says that this is the cheapest successful slab he has seen anywhere in the world. Each slab is hewn in two pieces which fit together : it is easier to make it in two pieces, and the halves are lighter to move. Dr Krishnan Tampi of our Public Health Department has brought the cost of reinforced concrete slabs down to Rs 3. The construction is so simple that they are easily and successfully made even by the honorary workers of the Paraniyam YMCA Centre. Dr Tampi's directions for the slab are : reinforced concrete 2′ 6″ × 3′ with a uniform thickness of 2″. There is a centrally placed oblong opening 14″ long and 5″ broad at the rear end and 4″ in front. On either side of this are two foot-rests elevated above the surface and sloping gently to the front. The entire surface is concave and dished in such a way that any water or urine falling on the slab will find its way into the hole. The humorous but practical and effective reason for the elevated foot-rests being made ' sloping gently to the front ' is that should the user try to sit the wrong way round, which would dirty the slab, the sloping foot-rests will pitch him over backwards.

Choose a site on the down side from the well. Dr Tampi tells our students that it has been found safe to put such a latrine within twenty-five feet of a well. I advocate at least a hundred feet if possible. The villagers like the 14″ borer better than the 18″ one because ' it goes down faster '. The 18″ borer is better as it makes a hole of greater capacity. Bore down 20′ if possible. If rock is struck, it is necessary to try in another place. If laterite, a soft decayed rock, is struck a few feet can be bored each day by filling the hole with water at night to soften the laterite. Even if a real rock is struck at 10′-12′ the hole may be used.

When the boring is completed, put part of the earth which has been lifted out around the hole to form a small

mound on which the stone or slab is placed. This will prevent surface water flowing into the hole during the rains.

The ordinary family can use a latrine like this from one and a half to two years. When the hole is filled to within about three feet of the surface, remove the slab, fill up the remainder of the hole with earth, and drive a wooden stake into it to mark the place. With the same borer bore a similar hole close by and place the slab over it. When the second hole is filled within three feet of the top, bore out the first hole with the borer; put the stone back on it; fill up the second hole with earth and mark it with a wooden stake. In this way the family can proceed through the years alternately using the two holes.

This sanitary system will work at a neat profit, for the residue after it is decomposed, de-odorized, and pulverized by the soil bacteria can be utilized or sold for fertilizer. A hole yields about three cartloads of this fertilizer which sells for four or five rupees a load.

This kind of latrine is free from offensive odours, is clean, and not unsightly: dark inside, it is impossible to see its contents. Birds, reptiles, or insects accused of spreading bowel diseases, will not breed in this hole. Washing in the Indian manner can be done over the hole, for the water going into it will do no harm.

'Suppose the ground water level is above the bottom of the hole a portion of the year.' That makes no difference. Authorities say that the action is then something like that of the septic tank. Do not choose a site which would flood over the top during the rains.

'What about sandy soil?' In real seaside sand, the sides of the holes may be supported by wicker basket work until they have hardened. Tin or iron may also be used.

'What do you do when the people do not use the latrines or when they dirty around the outsides of them?' We never have any such case. With us the question does not arise. We have been told that this is the great difficulty in places around Madura, where the District Board is said to

have bored about 3,000 of these latrines *for the people*. That is the reason for their trouble; they did not use the self-help method; they bored latrines, and gave them to the people. We may be sure that if the families are induced to bore these latrines themselves, they will not only use them but they will use them carefully, appreciating them as people always appreciate self-help benefits on which they have spent something or done some work.

Our system would give the bore-hole latrine to every family, one by one, as they are gradually convinced of the need of them and the decency of having them. It is interesting to see the idea of the need growing in a village. One little backward class village boasts a latrine for every house.

Sometimes we give a few rupees to encourage a village. These few rupees are distributed at not over half a rupee to a family to assist it in the purchase of the top stone or to give them food if they stay away from their cooly work to bore the latrine. In very poor villages where many families have almost no money the loan system (see p. 159) can be used.

The Fascination of Compost

Compost making is not only a valuable economic discovery for India, it is also a fascinating enterprise. Readers will be surprised that it has even found its way into an art society. Sir Albert Howard, C.I.E., delivered a lecture on 'The Manufacture of Humus by the Indore Process' in London before the Royal Society of Arts. Grainger finds it an inspiration to poetry.

Of composts shall the Muse disdain to sing?
Nor soil her heavenly plumes? The sacred Muse
Nought sordid deems, but what is base; nought fair,
Unless true Virtue stamp it with her seal.
Then, planter, wouldst thou double thine estate.
Never, ah! never, be ashamed to tread
Thy dung-heaps.

—From *The Sugar Cane*

It certainly is a joy to make something useful out of nothing, especially out of unattractive and harmful material. I like to turn useless things into value, and at the same time contribute to cleaner living and it is splendid to have plenty of fertilizer at hand for one's garden.

The planters of our State are energetically enthusiastic about compost. Every manager has orders to make so many hundred tons of compost on his estate a year. These keen business men find it fascinating, too, for they are getting results from greater yields, and naturally their enthusiasm and appreciation mount.

If rich estate-owners so value compost, why should not the villager, who is so poor, gather up all his waste material and make as much as he can of this valuable fertilizer, and at the same time keep his premises neat and clean, sanitary and healthy? How to make compost of the best kind and from different sorts of material, including human waste, may be read in the books and pamphlets listed in the bibliography at the end of this chapter.

I give here the outline of my very simple method. I include human waste, the loss of which is one of the greatest wastes in poverty-stricken India.

1. On any level bit of ground, the area of which will vary in size according to the amount of material available, lay out a space, say, 16′ long and 8′ wide at the outside. If more material, make several such spaces.

2. Spread, until 9″ deep, green material, weeds, human waste, hen manure, sacking, newspapers, refuse, anything and everything.

3. Put on a sprinkling of urine earth (made by bedding cows or other animals with earth) and ashes.

4. Put on a layer of fresh cow-dung about 2″-3″ thick. Even if no cow-dung or urine earth are available, compost can be made provided more than one-third of the residue is soft and of fine texture such as fallen leaves, legume crops harvested green, green grass and weeds. The addition of ordinary soil is necessary, and wood ashes, or lime if the soil is deficient in lime.

5. Water thoroughly. The process thus far constitutes one layer. By the addition of the manure, earth and ashes the mass is 'charged' so that the bacteria will start multiplying and working.

6. Repeat layers until 3' high.

7. Fifteen days after charging, turn and water thoroughly, putting one-half of the heap on top of the other half. The heap will now be only 3' high owing to decomposition and settling.

8. Fifteen days later, thirty days from starting, again turn the whole and water.

9. Thirty days later, sixty days from starting, turn the whole a third time, and water.

10. Thirty days later, ninety days from starting, the compost is ready for use.

Great are the joys of a cleaner, healthier village. When visitors who are really interested in rural improvement go around with us, nothing pleases them more than to see that the villagers have caught the vision of a cleaner life and have cleaned up. I recently visited several villages with our Dewan, Sir C. P. Ramaswami Aiyar. Nothing on the whole trip seemed to please him so much as when he came to the backward class village of Kurumathur, where cleanliness was actually practised. He mentioned it several times. He stopped on the rocky path above to glance back at the village.

'Have they really learned to like this? They didn't clean up just for my coming?'

'No, it always looks this way nowadays.'

'Well, this is great,' he said.

I believe in the possibility of pushing this campaign for cleaner villages and more spacious, cleaner living, until every house will have its own latrine, until attractive sitting places under trees or by streams will not be defouled, until leaves, rubbish and filth will be transformed into valuable compost to enrich the land.

CHAPTER XXIII

REORIENTING EDUCATION

The Story of Oollannore

Along a country road that follows a small brook in the narrow Oollannore Valley, came a barefooted high school boy. It was moonlight and after nine o'clock. He was on his way home from teaching in a night school of depressed class and untouchable children. He was a Christian boy. His mother was watching for him from the high cliff a little way out along the road from home. She had a complete clean suit—shirt and *mundoo*—ready for him.

'Dip yourself in the brook, Keevarchen, and put on these clean clothes,' she called. Every night when he came from the night school he had to do this because he had been with the untouchables.

She was a good Christian woman and a very good mother: she was only training her son in the general custom at that time concerning the untouchables. Indeed, Keevarchen's father was even more careful. Every time he came from market he dipped in the brook; and the rule was that there must be a man to watch so that, if necessary, this man could testify that the dipping had been 'all over'. Even when he came in from the fields where he directed the working of farm labourers, he dipped in the brook before going up to his house, for were not these labourers Parayas and Pulayas, depressed and untouchable?

That was thirty years ago.

This school boy was M. K. Varghese, the founder and living spirit of the new Oollannore Rural Reconstruction Institute which has been founded on the six acres of the

land surrounding the same old home. The main school building and the smaller ones are grouped around the old house on the bluff high above the road.

Socialization in action is the outstanding characteristic of the Oollannore project; and at every function the most striking phenomenon is that men and women, boys and girls, of all classes and creeds, including the former depressed and untouchables, all the people of the Valley are there, moving happily together without any sense of contamination.

I consider this Institute one of the most important developments in the field of Rural Reconstruction in the recent years. Its aim is so to reorient education that the young people of this valley will not have any abnormal discontent to make them want to get away to the cities; that the school shall so train them that the majority should be able to return to the lands of their fathers and live there a happy and successful life. It is expected that in ten years time there will have come about in the Valley a complete upward change toward a more abundant life, the school being the social and educational centre for both old and young. This is a new kind of Centre—the School Centre. All the teachers, who are well above the standard of usual rural teachers, act as extension workers in their spare time, much as our extension men work out from Martandam Centre. This project is an activity of the little Oollannore YMCA which works under honorary, unpaid leadership as so many YMCAs in our area do.

In addition to the benefits to Oollannore Valley, we expect that this project will be an example which may be studied and will have an influence throughout India and beyond.

A system of education suited to the needs of rural areas is a pressing need in India today. Probably all educationists agree that the present system is unsuited to such a rural country and that it is producing a growing problem of the somewhat-educated unemployed. The wrong orientation of the present system has been clearly pointed

out by several expert committees and several educationists.

The Royal Commission on Agriculture in India said, 'Unemployment is being accentuated by the present system of education. . . . agricultural-bias schools are a remedy.' The Auxiliary Committee of the Indian Statutory Commission supported this view saying that the present system based on urban requirements is wasteful and harmful. The Travancore Unemployment Inquiry Committee reported that the present system of education had neglected the formation and training of character, and that its contribution to the economic development of the State has been disappointing. They recommend that English and Vernacular middle schools in rural areas should be converted into agricultural-bias schools. The Travancore Educational Reforms Committee recommended the establishment of vocational-bias schools.

'After many years of experience and effort in the villages of the Punjab,' says Mr F. L. Brayne, Rural Reconstruction Commissioner, 'I am convinced that there is no better or cheaper agency possible for re-making Indian villages than rural uplift schools.' Dr Kenyon L. Butterfield reported, in his *Christian Mission In Rural India*, 'The real nucleus of rural uplift is the village school. It should give the village boys and girls an education that fits them for life in the village. Adult education should be an important feature of the school.'

As I write the Government of Madras after a survey of its whole field of elementary and secondary education have issued a *communique* which points out 'the defects in the present elementary education system and its curricula, including the antiquated methods and the divorce of teaching from environment. It emphasizes the need for rural bias. . .'

We hope that Oollannore will show the way. If it is to do so the curriculum is very important. Obviously a school with its pupils taking part in agriculture and gardening on these six acres of land, doing poultry-keeping, bee-keeping, weaving, other cottage industries, and domestic

science, cannot do all these things adequately and well, and at the same time keep on doing all that is required in an ordinary school.

Mr Varghese and his fellow educators have drawn up a syllabus which is just now being considered by the Education Department of Government. It includes rural reconstruction subjects, domestic science, enough fundamental subjects, and enough cultural subjects to provide a good education for a happy and successful life in rural India. The pupils come to Oollannore after four years of study in eight ordinary primary schools in the area around. They stay at Oollannore the fifth, sixth, and seventh years. If they then begin life as farmers, business men, traders, or home-makers, they may continue reading with the aid of books from the school's circulating library, they will have the benefit of the adult education and extension programmes, and constantly visit the school as their social centre.

'What about the small percentage of these rural youths who really ought to go on to High School and College?' After finishing the seventh class at Oollannore, such a pupil may join the Second Form in an English school and proceed straight on through High School and College. Had he gone to the English school in the first place he would have been in the Third Form instead of the Second, but from being in the Oollannore School, he has gained all the extra richness of that fuller training. Even though he will study a year longer before going to College, he will have saved Rs 24 in total fees, a big amount to poor parents, since the fees at Oollannore are only Rs 18 for three years, whereas in the First Form of the English School alone, of which he skips the fee, is Rs 24 for the year.

It is interesting to note that a larger percentage of boys from the Oollannore school passed the regular Government Vernacular School Examination than boys from nearby vernacular schools. This is in line with experience in other countries where pupils who spend part time on

vocational projects do as well in cultural subjects as those who spend full time on cultural subjects.

The school provides a meeting-place for the officers of the Government Agricultural, Industrial, Co-operative, and Public Health Departments enabling them to come in touch with the rural people. The results of the experiments conducted by these departments are communicated to the people and translated into action through the medium of the school and its teachers in their extension teaching.

It is the remarkable co-operative spirit at Oollannore that impresses everybody. When sanction for this school was received two days after the state schools opened for the year, they were not sure how many pupils would come. The first day there was only one pupil administered to by two high grade teachers in a room in the old Varghese home. In a month there were 103 pupils. The very urgent need for at least a roof to cover the pupils and the teachers was manifest. Hindus and Christians of all castes and creeds and conditions joined together, and in one day built and thatched a very substantial shed, adequate in size to house this growing school.

Then this co-operative spirit began to spread throughout the whole Valley. Across the fields stood the Jacobite Church without any roof; it had been roofless for nearly twenty years. An eye-witness of how the co-operative spirit took hold of this situation writes: 'Though many people do not believe in miracles in the twentieth century, yet a real miracle was performed through the Oollannore YMCA. You are aware of the great split that cut asunder the Jacobite Church of Malabar, about two decades ago. You know of the attempts made by Lord Halifax, Bishop Gore, Bishop Pakenham-Walsh and others, to bring about peace in the Jacobite Church. The little roofless church which you have seen from the roadside, do you know how that little church lost its top? That was due to the great split that took place in this Jacobite Church twenty years ago. The parishioners of Oollannore were so divided they

did not thatch the roof of the church building. The roof fell down, the worship was stopped, and a small jungle grew up inside the church. Thieves could hide behind the bushes. All these years there has been no Sunday worship, no Sunday School worth the name, no spirit of fellowship among the parishioners. Now you must come and see what a great change has taken place. The parishioners are united. They are one in mind and spirit, the jungle has been cleared away, the restoration of the church building is taking place in right earnest. It is an inspiring sight to see all working as one, the Hindus helping with the carrying of stones and other materials. It is a sight on which angels in heaven look down and smile. It came from the prayers and the work of the YMCA members and the school.'

The Hindu temple was in a dilapidated condition. The Christian leaders called the Hindus together and talked with them about this. They were all interested in every institution in that section being well looked after. The temple, like the church, needed a roof. The villagers recalled an old form of co-operation between Hindus and Christians in connexion with the temple tank which in olden days was annually cleaned by all people joining together. So now they went to work, thatched the temple roof, renovated and cleaned up the premises. Out of this grew a successful appeal to Government who have now taken over the maintenance and care of this temple—an assurance that it will be well maintained in future.

The account continues: 'Oollannore village was notorious for petty thefts. There were a number of young men in the village whose habit was to idle away their time. They wasted the day in card play and sleep; night was the time of their activity. They earned their daily bread by the nightly stealing of the agricultural products of their honest neighbours. Honest farmers gave up their cultivation because the fruits of their labours were snatched away by these nocturnal parasites. Now, a great change has taken place in these young men. They frequent the

reading room and library; they attend the farmers' classes, night school, lantern lectures, moral and devotional addresses. Personal contact, wholesome influence, and the interesting model cultivation in the school compound has further helped to bring a great change. Stealing abandoned, these fellows get wages for some of the work at the school, quite sufficient to maintain themselves and to make small savings. With the savings they have begun to cultivate their own lands. When the thieves took to cultivation, the honest farmers began again to cultivate, and with redoubled energy. There will be a plentiful harvest this year.'

Drinking was another curse of the village. 'The leader of the half dozen confirmed drunkards was the terror of the village', a correspondent from that section writes. 'Now you must come and see this leader: he is now a perfect gentleman, always doing some useful work for the school. Our plan is to give him plenty of work to do, to give him good company, and to pay his wages in kind. He has now given up the drinking habit and become a very useful man. The school has created a healthy atmosphere in the villages so as to make the wicked people feel ashamed of their wickedness and gradually depart from it.'

The folk dances of the villages, which are different in form from those in the Martandam area, but vigorous and excellent ones, are being revived. Since the school began to encourage them, those who knew them have been going from village to village teaching them.

There was no hospital or qualified medical aid in all that region. The Institute desired to run a dispensary. A Canadian delegate to the World Conference visited Oollannore and gave a few rupees to start a medical fund. Then Dr Howard Somervell, the great missionary surgeon, he who climbed Everest, accepted an invitation to open the dispensary and to give one day of his busy life to Oollannore. The usual opening function is entirely talk; this was a working opening. He was to come at eight in the morning. The day before, the sick began to come in or to

be brought in. Before the doctor arrived the school had registered 140 patients. By noon he had examined fifty cases and he asked the authorities to send away fifty of those registered, as he expected there would not be time for so many. With his usual vigour he worked straight on, eating a bit of bread and butter which they gave him at noon, occasionally jumping out of the window of the new building and racing round the compound to get a bit of air. The people were deeply impressed with his good nature and tireless energy. When the teachers were annoyed at the great crowds pushing into the place to see the doctor work, he was good-natured, mischievously throwing some water on them when it was necessary to push them back. He examined patients steadily until 9-30 in the night, and then drove over a hundred miles back to his hospital at Neyyoor, where more patients would be waiting for him.

Dr Somervell was so impressed with the needs of the sufferers of this area that he has agreed to be a regular member of the staff, visiting periodically. The school is now employing a young doctor and a compounder. The dispensary administers to an average of twenty persons a day. The doctor conducts hygiene and first-aid classes in the school.

The Institute's Co-operative Society is of a new type. The Valley is frightened of the very word 'co-operative'. The usual Co-operative Credit Societies were established there. They were unlimited liability banks; borrowing was easy; there was not 'all-the-way supervision'. Many are in debt there today because of the failure of that kind of co-operative society. Our Oollannore Co-operative had to start with teacher members whose participation would create confidence. The principle is that no money loans will be given. The teachers receive provisions and other necessaries of life the cost of which is charged against their pay. Members other than teachers can do all their purchasing and selling through the Society which supplies them with such things as manures, seeds, implements, yarn for their looms, beehives.

Two surveys have been completed but not yet fully tabulated. One is the general survey conducted on the 'simple' plan under the direction of Miss L. C. M. Ouwerkerk, Professor of Economics, H. H. the Maharaja's College of Arts, Trivandrum, with the help of the teachers and other local leaders. They prepared a special survey form and surveyed 62 families. These 62 families represent under the 'sample' survey system 620 families of the area.

The second is a dietary survey conducted under the direction of Dr Akroyd of the Government of India Nutrition Institute at Coonoor. For this survey it was necessary for a trusted surveyor to be present in every house, of the twenty typical families, before every meal, as they had to see the materials for each meal of the day before cooking. When these findings are tabulated, we shall know somewhat exactly what these rural people eat and shall be able to take steps for a more nutritious and better balanced diet. The Oollannore surveys will be as useful as the surveys we have done in other places and which we need to do wherever we work. They have emphasized the fact that while the expert surveyor is needed to direct, such surveys can never be correctly made by outsiders, however expert, without the co-operation of a number of local leaders who have plenty of local knowledge and the confidence of the people.

I was a bit anxious when I heard that Sir John Russell, who had come to India to advise on Agricultural Science, was to visit Oollannore, for he is a real scientist, and we had not yet been able to do things very scientifically at Oollannore. However, after the visit Mr Varghese wrote: 'It was a grand visit. Though the Director of Agriculture on arrival declared that the time allotted at Oollannore was only twenty minutes, Sir John and party stayed for two hours. They inspected the library, co-operative store, weaving works, poultry, bees, and the demonstration farm. Sir John had a long talk with the farmers who had assembled here. He went rather minutely through the statistics of the economic survey. He was alarmed at the

condition of the villagers. He said, "The Martandam ideal as translated into action at Oollannore is the right way and the only way for improving the condition of the villages. Though slow, it is a sure way."'

After one year of school the big shed was no longer sufficient, for 250 pupils were in attendance. During the past year, they have put up a very substantial school building, and classes are being carried on in both the big shed and the new stone building. The clay tiles for the roof of the big new building arrived by river in the picturesque, hand-poled *wallams*, but the river was two miles from the building, and there was no money to hire coolies to carry these tiles. About 150 Oollannore citizens came forward and carried the tiles on their heads from the river boats to the Institute.

The teachers at Oollannore are dedicating the years here as a labour of love. They work without assurance that there will be money to pay them, and for a small amount when they were paid.

The Spencer Hatch Rural Reconstruction Institute and School—they have paid me the rare compliment of naming the whole project after me—with its fourteen teachers doing extension service, the people of the Valley co-operating, is indeed a promising of our development with many suggestions for education in any country.

CHAPTER XXIV

ALWAYS IN TRAINING

WHEN we started Rural Reconstruction, our first problem was personnel, and how to train the leaders when we found them. That problem still remains with us. We started as pioneers; we are still pioneers. I had had a good deal of training for this type of work, but I had to adapt what I knew to Indian village needs. My helpers had the desire to do something, the conviction that something needed to be done, but little technique.

Some of our earliest workers were teachers. They had so much to unlearn. They had grown up having almost nothing to do with practical things; they had never taken care of poultry or animals; they had never worked with their hands; they were unaccustomed to tools, machinery, physical labour; they looked about for some cooly, probably half-starved, when there was any heavy work to be done. This emphasized our first principle already listed in Building Pillars of Policy, that workers must have a rural background. They must be acquainted more with the practical things of life than with so much theory unrelated to living.

Four prominent obstacles beset the path of the rural reconstruction worker: lack of the scientific mind, lack of business aptitude, the toleration of the second-rate, and the lack of definiteness.

It is absolutely essential that a rural reconstruction pioneer have a scientific mind. No scientists have done the research for us here as scientists have done for farmers in the west. Some years ago after very careful preparation

I talked to groups of rural workers about the need of the scientific mind as they proceeded with their work. I realize now that they did not become scientific because they could not understand what I was talking about. The whole idea seems to be entirely outside their understanding. So much in village life is a makeshift. There is no idea of long-time, steady routine work. There is so much that is all a last-minute struggle. Another reason for this lack of the scientific mind is that the workers have practically no technique or equipment for observation and recording. They do not seem to possess the energy to read all the books related to their subjects even when the books are provided for them. They do not become possessed with the idea of learning and understanding any subject completely. Although there are always positions for skilled workers, the will to be skilled is not general. They do not know how to be scientific and it seems to be too difficult for their non-inventive minds to work out any procedure and get started on keeping records. All of their projects can exist in a poor condition and they can muddle through to some meagre end; so they do. They are satisfied with that.

How to overcome these difficulties? We have found it necessary to give full and sufficient equipment for any project and then to teach the worker how to use it. The accounting system at the Martandam Centre is a case in point. It had never been necessary seemingly for any of our workers to keep accounts. When they did they were written hit or miss, in this book or that, on a slip of paper tucked in a pocket and often lost. There was a terrific struggle to write up books at the end of the year. This seemed to satisfy them. They could do no better because they knew no better. Our Headquarters Office helped us to install a system of accounting which would be as simple as possible and yet absolutely accurate and efficient. The accounts are now turned in monthly and audited annually. It has become almost second nature to keep the accounts as they should be kept. Any money, over which my district



MORNING PRACTICALS

Students bathing Bulls

office has control, does not go out to pay expenses, until the required reports are in.

Not only must the worker be given equipment, he must be given a place to work and time to do it. When the egg-marketing was carried on at the Centre in the midst of all the other activities and when the Secretary in charge had so many other things about the Centre and Extension Area to do, we seldom could get accurate reports, comparative statements, or definite plans from him. When the egg-marketing was handed over to the Co-operative Society and this same Secretary was loaned to the Society for a period of eight months his whole attitude towards requests changed. Monthly statements were worked out and submitted, comparative charts and graphs were drawn. I was elated. This was the sort of thing we had been asking for for years. Why did we have it now? Because John Rose had a spacious place to work in and sufficient time to work out ideas. The result was that he too became an enthusiast and did his work better. I feel that he is acquiring the scientific mind. It is a delight to see the growing tendency in Dasiah and some of the other young workers to study deeply into the processes and science of their various projects.

Business aptitude has not been natural to the average candidate who has come forward for employment in Rural Reconstruction, yet the more practical sides of the comprehensive programme very soon lead the workers into business with many commodities. Customers who pay a better price for better products have a right to their demand for quality, promptness, and business-like treatment. How difficult it has been for some workers to realize that the customers look upon their buying as a purely business transaction and not as a charitable deed. They will not tolerate excuses, simply because the YMCA is a philanthropic organization working with poor people. Nor should they. The staff in turn must learn to accept no poor work or lame excuses from the producers. How we long for a really first-class business manager to make the most

of the advantages of wide contacts and friends all over the world, advantages which no mere business firm could hope for, but which the Centre enjoys.

The toleration of the second-rate, as I have remarked when writing of our cottage vocations, defeats progress. I began to realize after a while that all my talk of quality was meeting with no understanding response. This was due largely to a lack of vision, and to ignorance. Many of the articles which were brought in for sale were as good or even better than any such article the workers had ever seen before. Naturally they thought it was good and were satisfied with it. The only way I have found to deal with this problem is by tireless work. Every handicraft, every piece of social work, needs rigid supervision and watching until some person of judgement can approve. The approved article or work is then explained and set up as the standard. The struggle is to maintain this standard. Plodding along tirelessly and continuously is the only way, there are no short cuts. Workers must make up their minds that experimenting to perfect any project cannot be accomplished by doing it two or three times. Experiments may have to continue over months. We must accept the fact that experimentation is essential, that it takes infinite care and patience, plenty of time, and some money. If we are not prepared to spend this, we are not really desirous of high quality, we are willing to tolerate the second-rate.

How much time, energy, and accomplishment is lost by those workers who are content to do every day just a lot of good deeds. Were that energy put into some definitely planned scheme of work, how great the accomplishment might be. Seldom do we find workers who have a definite goal before them and who work steadfastly toward that goal. Why do they not have such an aim ? Because they never learned to put themselves to work. They have not learned how to work out a problem and follow it through. In our efforts to do away with this vagueness, we have

banded ourselves into a definite working team. We have found it absolutely essential to fix responsibilities. There are no assistants at Martandam: no matter how young a worker may be he is an equal member in the team and is not working for another member of the team. The general operation of the Centre and of the Extension field is divided and definitely assigned. Mr T. R. Ponsford of England, during the session of the World Rural Conference at Martandam, challenged this statement and asked, 'In reality does it not work out that some senior man is responsible?' I replied, 'No, it is certainly not true that we hold the Centre Secretary to account for the failure of a younger worker in any responsibility that the younger worker has accepted. A senior man because of his experience might be entrusted with more important responsibilities.'

In our working conferences each man accepts certain definite responsibilities which he feels he can and would like to do. One does his best only when he is doing what he likes to do. He has a keener interest and more enthusiasm for this task and naturally accomplishes it better. If we find for instance that a staff member is not keen about poultry, in mercy to the chickens we do not assign the poultry department to him. If we did, we should probably find that he was leaving the care of the chickens to a gardener or servant and the poultry would rapidly deteriorate. It is a bit encouraging to know that if one does persist and persuade some staff member to study a project deeply and learn to do it well he becomes really interested and will go at his work with energy and enthusiasm instead of in his former careless, listless fashion. Such a method of assigning definite responsibilities means that gradually we train our staff into a working team.

We have instituted a system of *monthly reports* which is most valuable both to me, who am responsible for the general co-ordination of the whole work, and to each individual as a check on his own work. The workers report on their special responsibilities or departments. Such

reports help the worker to avoid vagueness and to visualize his progress, or lack of progress. The reason for lack of definite reports is often a lack of report forms. We first prepare together blank forms for each department of work or each project on which to record the operations during the month. Some of the workers who have not been used to keeping accounts or records and who have not even seen their parents keeping any records, tend to be tardy in preparing their monthly statements. They can, however, be taught that such definite observing and recording is not only a part of the scientific service of Rural Reconstruction but that it is a qualification for remaining on the staff. The ability to observe thoughtfully and accurately, and then to record that which is observed must be learned. We have found our monthly reports a useful way of teaching this necessary trait.

Another help toward definiteness is our *working conferences*. How much joy there is in getting beyond what might be called the conference stage. Many people stagnate in that stage; some seem to like it so well they continue to hold conferences, squandering time and money. I do not believe in the conferences arranged by those who say, 'Now we must arrange a general conference to discuss matters. We must consider what we might do.' Those really wishing to learn can best do so by visiting and studying places where successful work is being carried on. There is little use in just meeting somewhere to talk and imagine what might be done. Professional conference makers who round up the talkers and sitters to inflict conferences on the real workers, are far from being a help to the cause. They waste the time of people who are eager to work and who need their time for working.

I do believe thoroughly in the type of staff conferences we hold regularly. It is a satisfaction when by relentless study, trial, and success, workers have found out methods which bring desired results. And it is a pleasure to share these findings with other workers. Staff conferences of our Martandam Centre and Extension workers are held

about one day a month. We decide together what we shall do concerning the many items on our agenda and definitely assign the responsibilities. At each conference every member of the staff reports what he has actually accomplished on his part of these responsibilities. If he has not attended to any responsibility he accepted, he feels ashamed, and that item goes on to the agenda for the next staff conference. This is our most valuable check against forgetting or doing nothing, and our most valuable aid in keeping to the goal or aim ahead.

When we look at these problems of staff, let us ask ourselves the question: 'What is our moral responsibility? Can any organization afford to pay inefficient, careless workers month after month, year after year?' Although I do not advocate the Soviet system, I can understand its attitude when the State says to its executives: 'Our toiling masses, the Party and Government have given you a responsible position and you, what have you done? You turned out spoiled goods, we are not rich enough to tolerate this.' Therefore, the Soviet law says: 'Output of bad or incomplete production owing to lack of attention to tasks entrusted to managers of trusts, directors of enterprises, and administrative and technical personnel will cause their punishment by imprisonment of not less than five years.'[1] No movement such as Rural Reconstruction can afford poor workers.

One of the saddest things one sees in India is the need of early retirement. It is disheartening to see men still in their forties taking on the actions and attitudes of old men; to see them beginning to look around for younger men to run for them on any job requiring travel or action; to see them considering whether they are to go out in the sun, play in games, travel in more comfortable and expensive ways. They are old men though still under fifty. When any worker reaches this stage, he is generally in a rut which excludes him from changing his imperfect practices

[1] *The Christian Science Monitor*, 15 May 1936.

or bringing his projects to perfection. Usually by this time through increments of pay he is an expensive worker. What a pity that with all his training and experience he should decrease in usefulness so soon. But since this does happen too frequently, the situation raises a serious question of whether we should have still earlier compulsory retirement with adequate provident or pension arrangements making it possible for us to keep only active men on the staff.

We have learned that as far as Rural Reconstruction goes, workers are always students, they are always in training.

Women With Us. It is a mistake, though a natural one, that those actually engaged in the first years of the rural reconstruction movement are at least ninety per cent men. Rural reconstruction workers should number fifty per cent women. We cannot possibly make creditable progress until we have with us not only women workers but the general interest, understanding and participation of the women of the rural areas. I regret that among all the 900 leaders who have come to us for training since 1926 only ten per cent of them are women. Those who have come have set a high standard for the men students and have done very well while in training and afterwards. We are glad to have women students.

Mr Nanavathi, the Chief Revenue Officer in Baroda who spent unhurried time with me in the villages of that State, told me of employing an educated woman worker to go into the homes in Mohammedan and Hindu villages to give helpful progressive ideas to the women who take no part in progressive movements, partly because men are the leaders. He said that this woman worker had done what he, with all his great interest in rural improvement had never been able to do. We brought the Secretary who was to take charge of the Baroda Centre to Martandam for training and with him his able wife who took the full course. As I went about the Baroda villages three years later, I saw what a wonderful help Mrs Souri has been, in

spite of her home duties. Her husband goes freely to conservative homes to add his teaching and guidance to hers, and he has this freedom only because of the confidence Mrs Souri has established.

We have to confess that in the Martandam Area we have made small success in enlisting women leaders. This may be due to several causes: we were a young men's association, and until recently we did not emphasize the enlisting of women workers so much: we hoped some woman's organization would join us and develop that side of the work. In the villages it has been difficult to get a leader for even a flock of Blue Birds, when the little girls were so eager to be led. Some of the women who are very capable of leading have families to look after, some have not: families do not seem to be the reason. Even when the care of families is given as an excuse I cannot help thinking of the vast services performed by wives of missionaries, who also have families and homes to look after.

I have been encouraged by the way in which women in Central Travancore have taken charge of the restaurants of our Rural Service Exhibitions in that area, have made all arrangements, prepared and served good food, and turned in a creditable profit toward the expenses of the exhibition. I am encouraged by the help with rural surveys which young ladies of the Women's College, Trivandrum, are giving under the direction of a European lady professor. I am encouraged with the accomplishments of those who have taken our practical training course in Rural Reconstruction.

We continually increase our emphasis on the women's side of Rural Reconstruction keeping pace—and are always on the look out for women leaders. I advocate the employment of trained women in rural reconstruction schemes. We make it almost a requirement when recruiting a worker to our service, that he shall have a wife intelligent and interested in his work, eager to help him, eager to help others in the villages about her, and who will take the same training that he does.

For any of my bachelor workers who find such a girl and bring her into the work of our programme, we shall sufficiently increase his salary.

Our Apprentices. Rural Reconstruction involves so many subjects that the need for longer training than our annual intensive practical course in March and April is evident. We have students whom we call apprentices with us at all times of the year. They are generally earnest and devoted men. Some of them have to make real sacrifice in order to do this apprenticeship: one now with us has taken leave from his teaching in Ceylon for six months without pay.

We advise apprentices to include March and April in the time they stay at Martandam for then they get the benefit of the intensive five weeks' course when we are all there giving our whole attention to training. Several from each intensive course remain as apprentices.

A Director of Studies, a member of the Martandam staff, is appointed for the apprentices. He guides the course of training in accordance with our printed *Guide to Apprentices.* This *Guide* directs the student in prescribed reading and other methods of acquiring counsel and information. Each apprentice has regular daily duties at the Centre, such as taking care of poultry, bees, and live-stock. After a few weeks they take over certain of these features for a definite period as their own responsibilities. They take part with the members of the staff in all the activities both at the Centre and in the extension villages. Within a few months they have helped with and are conversant with all the operations of the widespread, comprehensive programme. They keep careful note-books recording all they do. These note-books are regularly examined by the Director of Studies, and by me.

Naturally we cannot take many apprentices at a time, for they must receive individual instruction and assignments. We do not like to take more than six or eight which explains why we have a waiting list of prospective apprentices.

One of the apprentices from Ceylon at the end of his

eight months at Martandam said in a public address: 'Before I came to Martandam I spent long hours in my father's office in his easy chair reading books. Since I came here I have done many kinds of work. I have walked much in the villages until my fellow-students make much fun of my worn heavy shoes. I am no longer a sitting man: I go back to Ceylon truly a "Rural Worker".'

Short-term Students. The experience we have gained in Summer and Training School since 1926 has helped us to include only the most useful subjects in our Practical Training School in Rural Reconstruction which we hold in March and April.

The course General Rural Reconstruction, which I teach, uses my *Up From Poverty* (see pp. 1-145) as a text, and while it presents the whole field of Rural Reconstruction, it gives special emphasis to poverty and its elimination; village organization for effective service; socialization, working for and with the whole community; the demonstration method; co-operative credit, production, and marketing societies; co-operating with Governments and other agencies; extension; and rural leadership.

My Centre and Extension colleagues assist both in classes and in the practical working periods with village surveys; night schools for young and adults; adult education in the villages and market places, the village library and circulating library system; the use of charts and pictures; work with boys and girls; the various cottage industries, including eighteen class lessons in poultry-keeping and ten in bee-keeping; gardening; improvement of cattle and goats.

The course Quickening of the Religious Life of the Village consists of morning devotional periods and study of the religious practices in the villages.

The Information Service course is given in the belief that when anyone accomplishes anything useful, it is his conscientious duty to pass it on to others. Rural leaders can do this by public speaking, writing and advertising. In our public-speaking class the students get honest,

sympathetic, criticism to correct mannerisms and other mistakes. In our writing classes, every article is written for a previously stated magazine or paper and submitted for publication. Actual advertising forms for use in the business side of Rural Reconstruction are worked out.

Our Health and Sanitation course is one for which we call on expert friends including the doctors of the Neyyoor hospital and the Public Health Department. Dr Somervell teaches what such rural leaders as our students can do to prevent air- and water-borne diseases and how to lead in case of epidemics. Dr Orr has specialized in teaching about current rural diet. Dr Krishnan Tampi has been one of our most successful lecturers on various phases of the sanitation programme.

Two qualified Physical Directors trained in the National College of Physical Education give us their time free during the vacations of their colleges. They teach character- and health-building exercises, playground games, and group games which can be played with almost no equipment and in limited spaces. Every student participates in these games so that he learns them well enough to teach them to others.

The students in groups make actual practice surveys in different villages—health, temperance, bee-keeping, poultry-keeping, and cattle and goats. These sectional surveys enable them to understand more comprehensive general surveys.

The students conduct educational market and village demonstrations, visit night schools, study the central library, and the village libraries which get books from it; they study actual groups of boys in our boys' work and observe the programmes carried on by the boys; they take part in the construction of bore-hole latrines and in the application of sanitary methods.

The students help with the small exhibitions in the villages and with the big Annual Service Exhibition for the whole area at the Centre. They witness how the villagers present our entertaining, teaching, socializing

dramas, and they take part in typical examples of these dramas performed in connexion with school and central exhibition functions.

From the answers to our final examination paper question 'What improvements can you suggest for the Centre, the Extension Department, and the Training School', we learned that the practical part of the school is greatly valued. Students suggest that they should have more than the early morning working practicals. In these practicals one group took care of the poultry; another of the cattle and goats; another the bees; another did gardening and general work. The groups changed, so that all students did all types of practical work. We are now introducing other practical periods in the midday and in the late evening after the games.

The types of students coming from all over India, Burma, and Ceylon to this Training School and for apprenticeship have gradually risen. We have great hopes for the future of Rural India when men and women of such splendid calibre are studying to lead in it. Every year some new idea originates in the student body. Last year they founded *The Old Boys' and Girls' Accomplishment Bulletin.* This year they published the first classbook. It grew from their desire to keep in touch with each other and to have a list of the names and addresses of the seventy students and staff. Photographs of all students and staff were pasted in the book. The classbook with its foreword, and actual photographs turned out to be a very neat souvenir.

The Annual Old Boys Reunion and Dinner is always an inspiration. The pride and spirit among the Old Boys and Girls of this simple rural school, the headquarters of which is an eighteen-rupee, temporary, thatch-shed classroom gives us much happiness.

The weeks of hard work and much fun at Martandam forges a bond of union among the students. Wherever these 1,700 students go all over India, Pakistan, Burma, and Ceylon, this fraternal tie helps and cheers them.

CHAPTER XXV

THE FINEST KIND OF CO-OPERATION

The Governments and the People

Wherever I go in India, Government officials tell me that they regret their inability to convince enough people to take advantage of the benefits which Government provide. Knowing how non-official agencies can accomplish this I am continually saying, 'The finest type of co-operation is the co-operation between Government and non-official agencies, where the latter create the favourable attitude and confidence and then call in the Government to help with demonstrations.' In this way Government can ensure their benefits reaching the people at very low cost. Through non-official agencies Governments get unusual devotion and skill for very little. Several Governments are proceeding more or less according to this method. The story of how the YMCA, the non-official agency I represent, is being called upon to help several Governments is an illustration.

Baroda. Few Rulers are more interested in the welfare of their rural people than His Highness Maharaja Sir Soyaji Rao Gaekwar of Baroda. At the people's Durbar in connexion with the celebration of His Highness's Diamond Jubilee, His Highness replied to the address from his people: 'On this occasion when my people all over the State are celebrating the Diamond Jubilee of my accession I desire to announce that I have decided, in commemoration of this happy event, to set apart a fund of one crore of rupees to be called the Diamond Jubilee Trust, the income

of which will be devoted to improving the conditions of life of the rural population, especially those of the poor and of the depressed classes, supplementing the amounts which will be progressively devoted to such purposes in the regular budgets of the State.

'My ideal is to improve the village life—all sides of it. I wish to develop in my people a keen desire for a higher standard of living, a "will to live better"—and a capacity for self-help and self-reliance. I earnestly desire to make village life interesting and farming a career the rewards in which will satisfy the most enterprising among the villagers.'

His Highness went on to say that the people all knew the main lines of his policy, compulsory mass education, village libraries, village panchayats and the abolition of harmful social customs like 'early marriage which has tended against nature and biological laws; caste tyranny; and untouchability which is against the laws of social justice. . . .'

It was this ruler who, through his able Dewan Sir T. Krishnamachariar, called us some years ago to co-operate with Government by helping to establish a Rural Reconstruction Centre. It was arranged that we would furnish a trained and experienced YMCA secretary to be the officer in charge of the Centre, that we should help with direction, and the Government should pay the expenses.

The place chosen for the Centre was Kosamba, a village on the main B.B and C.I. Railway from Bombay to Delhi, about sixty miles south of Baroda City, a natural centre of villages. The Hindus and Mohammedans in those parts live in separate villages, and in the outskirts of any village, whether it be Hindu or Mohammedan, there is always a section where the depressed classes live. To a large extent dwellers in the outskirts are those who serve the Mohammedans and higher-class Hindus.

Early in 1933 I went to serve as actual Officer-in-Charge between the periods of service of two of our Indian secretaries. During that time, in accordance with the wishes of

His Highness the Gaekwar, I conducted a Training Course similar to those we hold at Martandam.

Promising younger officers from five departments of Government—Education, Sanitation, Revenue, Agriculture, and Co-operation—were selected to train in my school. His Highness's very important idea in wishing all government officers to understand the comprehensive programme and in sending members of different departments to train together, was to break up the tendency of officers to go to a village only on a day when they were sure officers of other departments would not be there. There was need for greater co-operation between the departments.

Day after day during our Training School, we went into the villages, sometimes on the State system of lateral railways which branch out from the main railway line and take the place of roads which are difficult to build in the soft, stoneless soil of Baroda; sometimes by walking long distances, sometimes by bullock carts. We called all the people together and sat on the floor with them. The various government officers asked them questions regarding their needs.

In one village the people said one of their greatest needs was to have their bullocks castrated and they did not know how to do it. A government officer immediately said, 'Why, the rural headquarters of the Veterinary Department is only a few miles away, and there is a Government rule that the Veterinary Officer should visit every village periodically and that he should castrate all the bullocks free of charge.'

The Headman said, 'No Veterinary Officer has ever been to this village. We did not know that Government had made any law to help us in this matter.' I use this incident to illustrate that without the 'intimate, expert guidance', rural people often do not know what helps the benevolent Government has provided for them.

His Highness the Gaekwar said he wished he could be a pupil in our school. As soon as he was able he did come

down to the Kosamba Centre. When His Highness was looking over the Centre he caught sight of my book *Up From Poverty* in the library.

'We must get this book translated,' he said to the Dewan, 'and put into an edition so inexpensive that all may learn what it has to teach.'

The Baroda Government bought the translation rights and published a Gujarati edition which they sell at four annas a copy. This is in contrast to the translation of the same book in another language which costs six times that amount.

Last year after all the gorgeous functions and splendours of the Jubilee, my family and I went down to the villages in the Kosamba area. In the capital city I had carefully questioned the chief officers of different departments and found they all agreed that Rural Reconstruction should help the people to help themselves upwards on all sides of life simultaneously. This means that the Officer-in-Charge of the Rural Reconstruction Centre is essentially 'an improvement officer', helping to co-ordinate the works of all departments so that they may work together as a unit. He must have a general knowledge of the different phases of rural life and improvement; he must be able to make all the officers feel that he is a friend and helper in their work, or they will look upon him as a troublesome meddler; he needs tact to an unusual degree.

On the farms around, the owners gave testimony of how they had improved their crops and income through suggestions received from the Centre. Mr Bai Lal Bai, a cultivator, said that he had just refused Rs 300 for some land he bought a few years ago for Rs 40, and he gave the Centre credit for the improvements. Mohammed Patel was experimenting with dry farming—raising such crops as tobacco without watering. Cultivating by dry farming methods should be practised in many parts of India. Mr Motilal Patel at his Broad View Poultry Farm, showed us his forty graded Leghorns. Mrs Ibrahim, a Mohammedan woman, had sold seven one-day-old chicks for

Rs 6. When we offered four annas a piece for some newly hatched chicks she smiled and said, 'You know better.' All these people showed great pride in their accomplishments.

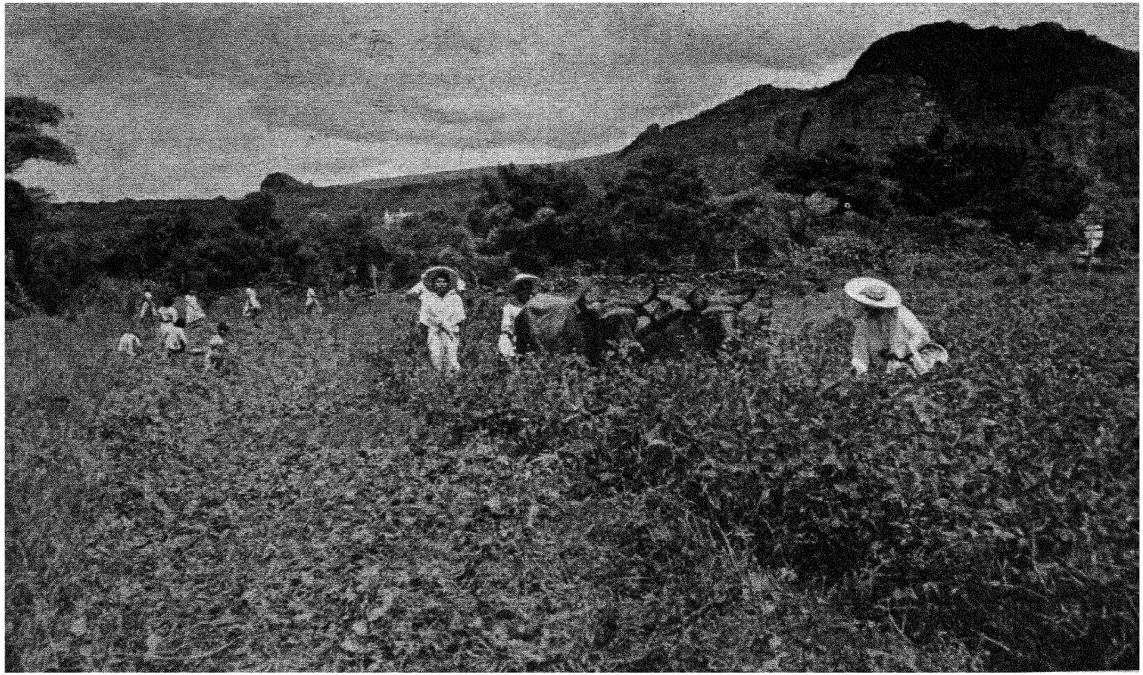
All through these villages we saw White Leghorn cocks which had been supplied from the Centre. The Centre takes two country cocks in exchange for a pure-bred. A poor family gives one country cock on receipt of the pure-bred one, and the second later on. The depressed classes were having difficulty in keeping their improved chickens because wealthier people, taking advantage of their ignorance and need of money, bought their pure-bred chicks for one anna each the day they were hatched. We saw some improved chickens in the depressed class sections of the villages.

We saw people who had moved out of the congested dirty villages onto their own land as I have described in the chapter 'Cleaner Living'. Adam Patel, at his Star Rural Farm, told how many people from many villages stop as they pass his place and ask questions. He is an example of the 'static leader' who has wide influence although he does not set out to be a leader.

Kitchen-gardens everywhere in the villages were among the most important new successes. Schools were having school gardens and keeping them watered even during the dry weather, which is somewhat difficult.

At one village we found forty-five boys and thirty-five girls crowded on the floor of an upstairs schoolroom. It was encouraging to see the untouchable and depressed class children sitting about among the others, not isolated as I formerly found them in other places. Untouchability is weakening. Three years before I had gone into a nearby school and had seen a pretty little girl sitting by herself like a queen on a bench in the middle of the room while the other children were in a row around the wall. When I asked why this girl was sitting like this the other children pointed to her and said, 'Untouch'.

We were told here that a hundred per cent of the



DISCING IN COW-PEAS PRECEDES THE 'MIRACLE'

children attend school. That means that His Highness the Gaekwar's progressive law for compulsory education is really effective here. In my presence that day the teachers and village leaders wrote a request to the Government to help them provide a better school building. They signed an agreement to pay half the cost, if the Education Department would meet the other half.

In many villages we found the people making bed-tapes which is a new industry suitable for boys and girls or adults. In one village the people, dissatisfied with the muddy, bad lanes and roads, had spent over Rs 1,000 during the year to improve them. They need to follow up their good beginning with sanitation improvements.

The Kosamba Centre deems training of leaders to be one of its most important duties. Since my first Training School they have conducted several schools for young village men, several schools for teachers of the Centre villages, a three months session for Veterinary Assistants, and this year a Summer School of Cottage Industries.

The Centre markets eggs in Bombay. The system is not self-collecting as at Martandam and Paraniyam. A collector sent out by the Centre, visits eleven nearby villages and brings in the eggs. Kosamba would do well to specialize more in eggs from improved hens, in order that the better price may spur the people on to a rapid grading up of their fowls.

Hyderabad. Twenty-five miles out of Secunderabad City is the village of Pattancheru. Here we established a Rural Centre at the request of His Exalted Highness the Nizam's Government. We were to run the Centre, Government paying full costs, with one of our best trained YMCA secretaries in charge, until such time as our secretary had trained a local man well enough for him to take over. When such a time arrived, we would withdraw.

This was to be a Government Centre with everything done on a more splendid scale. Government would not be satisfied with a simple non-equipment, non-owned set-up like we have at Martandam. They never would be

satisfied with our eighteen-rupee school building in which to do much important training of future leaders.

They desired from the very beginning that a fine lay-out along the main road would favourably impress passers-by. Plenty of land was provided and along the extensive front a neat wire fence was built. On the spacious land, fruit and vegetable plots were neatly laid out. Substantial buildings were put up for the live-stock, poultry, and other needs of the Centre. A large and impressive building was constructed solely to house a permanent exhibit or museum. This exhibit was made so attractive and so educative that bus-loads of pupils from the cities were brought to see it. A hundred beehives were set up in impressive array within sight of the road. This was done before bee-keeping had been tried out there (which was a mistake for it was discovered that honey bees did not thrive there).

After the Centre was started I went into the villages and saw the beginning of extension work among the village families. These families had improved fowls to exhibit in a most successful poultry show and teaching demonstration, which Mr Stephen put on in the capital city.

In due course Mr Stephen handed over to a Hyderabad officer who would work the Centre under Government management. This officer very soon came down to make a personal study of our work in the Martandam and Paraniyam areas. He keeps before me an invitation to visit Pattancheru Centre whenever I can: thus we continue to co-operate with the Government.

Pudukkottai. My first thought as I drove through Pudukkottai State, answering an invitation from the Durbar, was 'What a lot of waste land. What a lot of cultivable land producing nothing'. I thought of how we practise dry farming in Canada and in our western United States. I remembered how farmers at home had always gone out after a summer shower to loosen the top surface-soil between corn rows, thus breaking up the capillary system and action in the soil. The dust mulch made on the

surface would not permit the moisture in the subsoil to work its way upward through the soil tubes to the surface, to be evaporated quickly by the summer sun, for the cultivators had clipped off the tops of all these tubes. The evaporating system would not be set up again until the next rain.

When the skies refuse to yield enough moisture we cannot increase the rainfall, but we can do much to hold what water the land does receive and to make it last longer. If land is sloping we terrace, or plough along the contour levels, or do 'strip cropping'. This means alternate strips of, for instance, clover and corn, planted along the contour lines: the grass strip between the cultivated strip tends to make the rainfall stand and soak in instead of racing away. We practise crop rotation with a good proportion of moisture-holding crops in the cycle, such as the grasses. We use the moisture of two years to raise one good crop when it would be insufficient for two yearly crops.

I recalled how Angus Mackay accidentally discovered this method as he pioneered in the stubborn soil in the Winnipeg area of Canada more than fifty years ago. Just as he had finished ploughing his lands ready to put in the wheat, rebellion was suddenly reported among the Red Indians of the far North. The military clanked and rattled across Mackay's lands, grabbed all but one of the horses, all his few hired men and took them to haul supplies for the troops of the new war.

There lay Mackay's fields all through the summer all ploughed but only half sown. Some fine rains came and the water sank into the ploughed fields. Mackay hated weeds and could not let them grow. With his one horse he could do no more than harrow the fallow ground to keep them down.

The next spring when the men and horses came back, he sowed wheat seed in all his land, both the half which he had sown the year before, and the half which had lain fallow. The strange unplanned experiment began. May and June went by with no rain. In July, instead of

showers, came hot winds! Not a drop of rain, what could it mean but hunger and failure? Disheartened and anxious, Mackay watched his fields. He watched a miracle develop before him. The wheat of the entire North-west shrivelled in the stalk. August came and went—hot, dry, merciless. On the half of his land which he had sown the previous year, before the men went off to the rebellion, the wheat was a failure, hardly two bushels to the acre; but in the fields beside it which had been fallow the year before the wheat grew and filled. Mackay reaped thirty-five bushels of excellent, hard wheat on every acre. 'Out of my loss, has come great knowledge and wealth', said Mackay. 'It is dangerous for this dry country to try to raise crops one year after another on the same field. Plough all the land in the spring, but let half lie idle all the year.' He had used two years' insufficient rainfall for one good crop.[1]

My first suggestion to Pudukkottai State was to introduce dry farming methods. In Travancore near Martandam I find native tillers practising dust mulching, although they have never heard of 'capillary action' in the soil. After a shower they stir the surface-soil with their *mamatees.*

Pudukkottai holds the record for putting suggestions for Rural Reconstruction into action quickly and accomplishing a great deal without much extra expense. It appeared to me that Pudukkottai did not need to establish entirely new Centres at present but could use the Poor Home and the Agricultural Farm as bases. The Poor Home could start at once practising self-help, for the children could be taught to take care of the gardens, the poultry, do the housework and cooking. The change to this method would benefit the children who 'seemed to have no mind for work' and improve the projects, too.

One of my recommendations was that the Durbar should send two carefully picked young officers to Martandam for training. They sent four. On his return one of them was put in charge of the rural development at the Poor Home

[1] See fuller story in Kruif, *Hunger Fighters*, pp. 33-44.

Centre. The reports of his accomplishments are among the most pleasing I receive.

With the Administrator, Sir Alexander Tottenham, and the Assistant Administrator, Rao Bahadur R. Krishnammachari, we went to various villages. We found old women half-heartedly weaving wool blankets. A potter said he owed Rs 300 at six per cent interest which he could not pay. A few old people were weaving poor quality *kora* mats in spare time, earning only one anna in three days. In the school they were weaving by hand some rather poor towels. They were making the same common mistake of demonstrating too expensive looms: one cost Rs 100. There was no hope of the ordinary people copying these looms in their homes. We were told that a pit loom which would weave just as well, could be bought for Rs 10, but there were none to be seen. Everywhere the story was the same: the young people would not learn these old handicrafts and stood about giggling at us when the old people complained. A good quality product and a lively market would change their attitudes, I felt sure.

At Valatharakottai village, Chinna Ambalagar, chief man of the village, was already following suggestions of the Improvement Officer who was one of the four trained at Martandam. This village has been made one of the State's chief centres for Rural Reconstruction.

It is fortunate that in this village, which has been selected as a Centre, Mohammedans, Hindus, and depressed class people live close together with good feeling between them. Socialization—the whole programme by, with, and for the whole people—can well be demonstrated here.

Mohammed Hussain Ibrahim, a leading man in Annavassal Mohammedan village, promised to demonstrate growing and producing different products recommended for the rural reconstruction programme. He will make these demonstrations for a nearby school. This is a valuable help to the Durbar and one of the best methods of demonstration. That the demonstrations can be carried on near

a school will add immeasurably to the amount of influence they will have.

One of the most interesting meetings I have ever attended brought all the chief officers of the State together in the Durbar Hall. One by one I questioned these men regarding their activities in the rural areas. The superintendent of schools talked fluently on the need of changing the syllabus for rural schools so that time would be available for rural reconstruction subjects. He was then and there requested to prepare such a revised syllabus. This will not be so easy. As I questioned the Medical and Veterinary, the Revenue, Co-operation, Engineering, and Agricultural officers, we found for each direct connexion with the rural people. The last officer questioned was the Chairman of the Municipality of the one city, Pudukkottai. He assured us he had no connexion whatever with rural problems.

'What about that big market which operates just on the edge of the town ? The people and the products look rural. Does the municipality have anything to do with that market ? '

'Oh yes. We collect a tax on all the articles sold there.'

'Then you do have a connexion with the rural people.' He admitted he should have.

This clinched the argument I had been developing through questioning these officers : every officer and every department of the State has responsibilities for the well-being and progress of rural life, and should fit into a rural reconstruction programme ; and that they should co-ordinate their work in the villages to make a concerted attack upon the rural problem.

Pudukkottai in a year and a half has developed several Centres under the direction of the four men who were trained at Martandam. The reports these men make spell real progress.

Mysore. In this progressive State the YMCA Centre is subsidized by Government. The Centre may be reached from Bangalore, about 23 miles north, by train or bus.

The location was selected for several reasons: it is on the main highway and railway; it is the centre for several other villages; adequate buildings were already there.

Government gave the land and buildings, an initial grant for equipment, and provides the yearly maintenance grant. Mr Stephen, who had previously been at Pattancheru, has created a very orderly and neat Centre. To buildings already there he added further fencing, wells, poultry houses, and an apiary. This is our most polished Centre, in some respects probably almost too expensive an ideal for the villagers to copy.

The Centre is only three years old, but in the nearby villages which I visited I saw many improvements. I saw the improved breed of sheep which yielded two pounds of wool each more than the ordinary sheep. I saw the new bullock carts with inflated rubber tyres; compost heaps; cocks, distributed on the exchange system—one pure-bred for two country; pigeons, a profitable cottage industry; bed-tape weaving on simple looms; the co-operative store. I saw windows which had been built into some of the houses, and blocked up holes where windows had been because the women said these new holes let in too much cold air! I saw chimneys, made of old kerosene-oil tins, on the tops of houses and breathed a sigh of thankfulness that the smoke from the cooking could find a place other than in peoples' eyes. Soak pits behind the houses absorbed the dirty waste water that formerly lay on the surface, a filthy, muddy mess. This water now filtered through a top section of small broken stones on which the sun's rays played into seven feet of broken bricks.

I met the village midwife who has been taught to use disinfectants, soap, clean basin, and clean towels. She was planning to earn the promised reward which was awaiting her at the end of the year if all the mothers of new babies could say that she always used these improved accessories. I met the village barber who now disinfected his razor and reserved a special one for lepers.

I saw Mr Stephen's excellent exhibits at the World

YMCA Conference at Bangalore. He has just held his third Rural Service Summer School to train leaders.

Ceylon. Last August I went to Ceylon, primarily because the Colombo YMCA had been urging me to help them establish the city-rural development for their Association. While still in Colombo Harbour, morning papers brought to me on the ship made it clear that I was to have a wider mission.

Except in time of war, I do not expect to find any country more interested in one cause than Ceylon was in Rural Reconstruction. The recent terrible malarial epidemic had forced the big prosperous city of Colombo, the Government, and the people generally, to the realization that there was scarcity of food and other necessaries of life among the rural people to an extent which they in their better fortune had never dreamed.

I found the Government interested, wanting to find out what to do, and willing to spend more freely than any other place in the orient has probably been willing to spend on Rural Reconstruction. Even when there is plenty of money, it is not always easy to know what to do. Mr Corea, Minister of Labour, Industry, and Commerce, whose scheme for Rural Reconstruction is now before Government, arranged for me to speak to the State Council on this subject and show how Government could accomplish much by co-operating with non-official agencies. It is indicative of the Government's real interest that nearly every member of the Council and the Ministers remained after a long heavy day in the Council to hear me. At the invitation of the Chief Minister, Sir Baron Jayatileka, I discussed the problems with him. Later Sir Baron came to Martandam and spent several days studying our work in the villages.

I travelled to different rural parts of the Island with various Government officers. I became convinced that, although one does not get an impression of great need as one motors along the excellent main roads, there is plenty of poverty among the rural population to justify all this

interest. The rural people are not only poor, they are a prey to heartless middlemen who give them little for their products.

Although the big Government scheme is only on its way, there are some pieces of Rural Reconstruction on the Island already making progress. With a superintendent of schools I visited the Rural School Training Centre at Mirigama and some of the ruralized schools. Boys in these schools were building small houses and wells, carrying on agricultural projects, and practising handicrafts. This should help them to settle on their lands to live healthily and sufficiently. It was encouraging that this experiment, started only three years ago, has grown to include about 150 such schools. These schools mark progress in the needed reorientation of schools for the rural population. At Mirigama, the Training Centre, we found teachers actually working in the fields, barefooted and coatless, doing themselves what later they would and could teach others.

The Boy Scouts of Ceylon have coupled training with practical rural service at the Kalutara Scout Colony. Unemployed scouts, after training, have reclaimed jungle land and built their own homes. This Colony runs Summer Training Courses. I saw a number of headmen who after training, had cleaned up their villages and developed parks, playgrounds, and reading rooms. They had improved agricultural methods. Because they had learned to co-operate they banded together into a village Rural Service Council to help forward their plans.

I was really impressed with what is being accomplished in the Ceylon Government's Marketing Department under the leadership of Mr R. H. Bassett. He embarrasses me by claiming that for whatever he is doing he got the basis for it through the description of our marketing principles and practice in my book *Up From Poverty*. His scheme for marketing co-operation between the great cities like Colombo and the rural villages was excellent. During my stay he opened a depot, at Galle, which would sell needed

articles which the local merchants were not providing. 'If I find the sales here falling off, I shall close the depot, knowing that the local merchants are doing their job more fully and better.' Mr Bassett gathers the products of the villages and cottages into sales depots in Colombo for sale to city people and tourists. 'The best way of advertising Ceylon's produce is to sell it. By introducing the Ceylon public to their own products we increase the sale of Ceylon goods and educate people to buy them.' He backs me whole-heartedly in my crusade for quality and believes that selling only the best will prevent the production and sale of inferior works.

Ceylon's great problem at the moment is to get rid of malaria. Wherever I travelled, to the south and to the north, to the hills and to the plains, I found mosquitoes. Although a gigantic task, I believe malaria can be greatly reduced. Panama's example is an encouraging support. With the dangers of malarial infection reduced, Ceylon offers a glorious field for Rural Reconstruction. The extensive, fertile Dry Zone can be brought under cultivation and become again the granary of Ceylon to feed her people. Methods of dry farming should be experimented with in this area.

The Colombo YMCA has selected the site for the Centre which it will sponsor and has recruited a Martandam trained man to be in charge.

Leadership in Rural Reconstruction is an all-important matter now. Many are interested in doing this type of service. This year alone twenty-one promising leaders from Ceylon have attended Martandam for the Training School or as apprentices, or both. Ceylon offers a glorious opportunity to rural reconstruction workers. An abundant rainfall, fertile soil, ready shipping facilities pave the way toward greater prosperity. Standing as she does on the crossroads of the East, she would be able to demonstrate to that horde of travellers who pass through her gates, the way to more abundant living.

Cochin. Cochin State is the latest. At the request of

the Dewan, Sir R. K. Shanmugham Chetty, and the Government, we are assisting in opening on 1 March 1938 a Government Rural Development Centre which the Dewan believes may become the best in India, backed as it is by the resources and interest of the Government. Cochin State is of convenient size and shape, a workable area, so that the whole State can be brought actively into the extension programme. We enter this new field with enthusiasm.

There are so many opportunities for co-operation between Government and non-official agencies. It is a time when one wishes he had several lives to give. There is the overwhelming consciousness: 'So much to do; so little time in which to do it.'

India's Country Life Movement

Theodore Roosevelt, the great, dynamic, farseeing, American, led in starting the American Country Life Movement. It was at a time when the farmer was disparagingly called a 'hayseed'. The farmer had an inferiority complex, knowing that city people, and educated people generally, looked down on him.

Roosevelt's Country Life Movement over a score or so of years helped to change everything. It brought to the rural homes and farms many of the advantages and amenities of living which formerly only city people had. It made city and country dweller alike realize that city conditions could in no way compare with the healthy life of the beautiful, wide open spaces of the country-side. It included agricultural college education for the farmer; it brought the teaching of agriculture, home-making, and home economics into the high schools; it brought the realization that agriculture and rural sociology were among the important sciences. Agricultural colleges took their places side by side with other colleges in the great universities. Rural life became more prosperous and happy. The whole rural populace lifted itself from the 'hayseed' stage to one of recognized equality.

In India, Burma and Ceylon for the first time we have our Country Life Movement. It is called Rural Reconstruction. It has God's guidance. It can and must help our rural brothers and sisters to lift themselves further upward.

CHAPTER XXVI

THE MEXICAN CHAPTER

WE were prevented by World War II to return to India after our third furlough. In Mexico some persons who had read my *Up From Poverty* and *Further Upward*, urged us to help them get started on a similar programme. Though side-tracked by the war we were glad for the opportunity to use our experience to help get Rural Reconstruction started on this side of the world. We went to Mexico on a six months' interim appointment. Would the Five-sided Triangle be the proper emblem here; would needs be of the same kind and divide themselves into the same five departments for the comprehensive programme? Would the tried principles and methodology developed over those eighteen years in India, be applicable in the Western Hemisphere—adapted of course? Could this personal approach be used as a pattern for other peoples?

Roadless and Neglected. Sixty-four per cent of the villages of Mexico are roadless. No wheels turn in them. Burdens are carried on the backs of poor horses, mules, burros, and the people themselves, along barefoot paths. These sixty-four per cent may be called neglected. The government agricultural agents generally stick to the roads. They do not attempt the long hard paths to these roadless villages.

The National Department of Education decreed that each village should build a school house, and they would supply the teacher. But their budget, smallest of all the government budgets, was not enough for even this and there were not enough teachers. It developed that even

though a teacher was appointed he did not always stay in the hard conditions of one of these villages in our area. The small village school, fortunate enough to have a teacher, had not more than two grades, so that after two grades, boys and girls would be out of school for life—their schooling finished.

The land around these villages was much worn, some of it abandoned. Many fields could be made to produce only every second or third year after they had remained fallow. Animals and poultry were poor and of no particular breed. Housing was too often pitiful. Life was extremely hard. Like so many communities in which we had worked in India, there was need for improvement on all aspects of life.

The Gauntlet of Suspicion. One important situation here was different from India. The people of this isolated region had a distrust for outsiders; even a Mexican from the City or a Mexican from any other part was to them just about as much a foreigner as we were. They had plenty of background for this lack of confidence that any outsider would be their friend: plenty of reason for putting him through a long, severe, gauntlet of proving himself. They had been duped so many times; promises had not been kept; their fathers had fought a bloody revolution to regain lands or stop encroachment.

Among our new friends we soon discovered we would not do any propaganda. 'How can anyone from outside come here and tell us how to live,' seemed to be the feeling. 'We live here; our forefathers lived here; we know how to live here.' Nevertheless they were very good at intelligent watching, and thinking, and deciding what they wanted. More than ever the demonstration centre was the method we needed. Through it we would get a chance to help them on those things they, not we, decided upon. Here was an excellent set-up for our 'suction' method to get into action. The 'squirt gun' method would not work.

The villagers soon exhibited sterling traits. For instance, these very rural people were honest in a high degree. We

had struggles to collect when we trusted city people, but we could let these village people carry good things like Poland-China cross-bred pigs or handwoven blankets over the hills to be paid for in instalments. They would turn up and pay on the due date. We could and did trust people we had never seen before.

The Centre. Following our usual technique of how to choose a centre, near a larger village which was a natural market centre for several other villages around, and a little beyond the end of the road, we secured a ten-acre field on which to develop the first Rural Demonstration Centre of its kind in the Western Hemisphere. The Indians had long ago named the field *Camohmila* (the field of the sweet potato). Sweet potatoes must have grown there once, although we searched the whole area in vain. We wondered why they sold this field to us, for these Indians do not sell their too limited land. They told us a year later, when they came to marvel at a good crop of corn which they called a miracle: 'The only reason we sold this field to the YMCA is that it was absolutely no good. It was entirely worn out; we had stopped trying to raise anything.' An early analysis showed that this soil's greatest need was organic matter. Now the land was only infertile and sandy.

With a certain amount of difficulty we imported seeds from the United States and planted cow-peas with the intention of ploughing them under. They grew with long wines of heavy foliage and an abundance of nitrogen nodules on the roots. When we were ready to plough the peas under, the people thought it a very foolish plan: 'When a nice crop has grown we ought to eat it or let the poor animals eat it,' they thought. They felt better and were immediately interested when we invited the senoritas from two villages to pick the peas, giving half to us and taking the other half to their several homes to eat. They were favourably interested now in seeing us plough under the foliage. Next year we had the miracle—corn nine feet

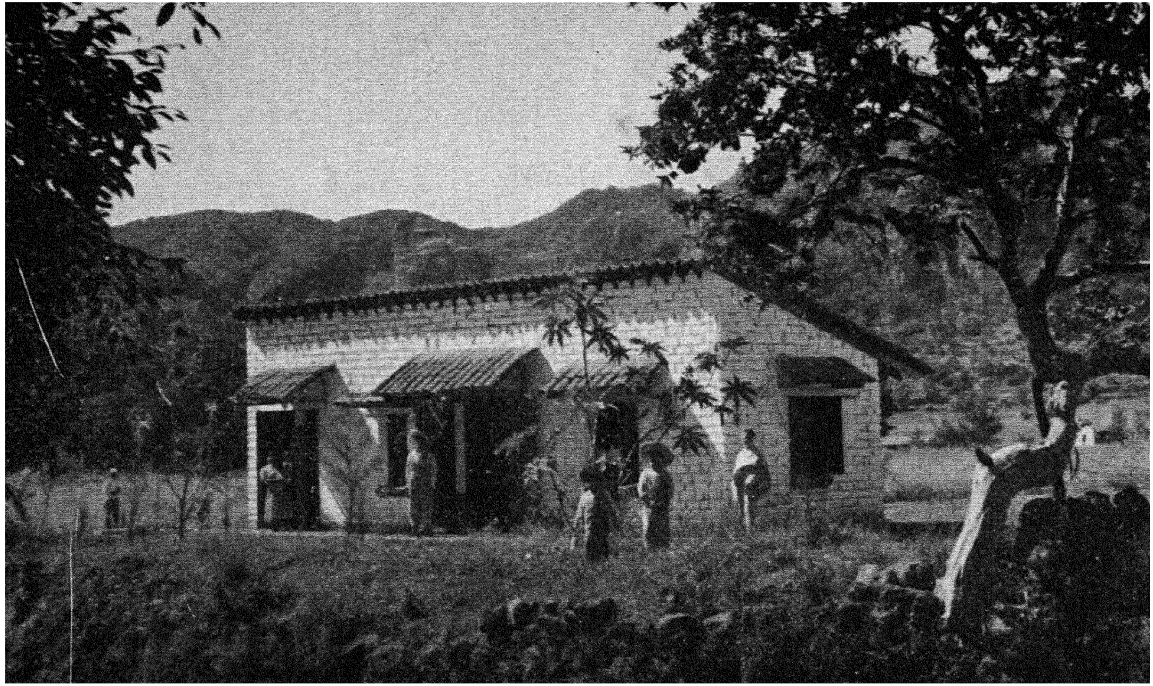
high with big ears on the very soil they knew was worthless.

For the demonstration animals and poultry, we started building very small, simple open-sided structures. Each one was separate, easily imitable, one each for the Holstein and Jersey bulls, the Poland-China pigs, the country sheep with Merino rams, the Grenadina milch goats (poor man's cows), the Pekin ducks, the Barred Plymouth Rock and Leghorn fowls, and one for young chickens. After detailed surveys as to needs, likes, and available stock, we decided on these breeds.

A long building with a veranda running full length was to be the centre of many activities. The people gave it the name *Huei Calli* ('big house', in their Nahuatl language). It housed the permanent exhibitions all round the walls inside, the loan library, the women's and children's department, training classes, the weaving and other cottage industries, the clinic, and office. *Yancuic Calli* 'new house', a model house for Mexican family was built although our city advisers told us housing would be the last thing in which people would be interested.

Search for Staff Colleagues. We had been warned of the difficulty of finding a Mexican staff. Walter Taylor's greatest regret when he was almost ready to retire, after over thirty years as general secretary of the Mexico City YMCA, was that he had not been able to work himself out of a job. No one in his staff of more than a dozen Mexican secretaries even aspired, to be general secretary. Anyone of them knew, we were told, that the others would not work for him.

No one, trained in any of the sciences necessary for Rural Reconstruction, could be found who would be willing to stay in the isolated, rugged region of *Camohmila.* We had to start with one after another person of very little education, and face the long, long trail of teaching by doing. We had plenty of turnover, as they dropped out for various reasons. We operated the Centre and Extension with an Administrator, a young doctor, an animal care-taker, a



Yancuic Calli. MODEL HOUSE AT *Camohmila*

shepherd boy, and field workers. Later we had a practical nurse, a weaving master, and a technician in the co-operative kitchen, whom Mrs Hatch trained all the way up from the day she came to our kitchen, poverty-stricken, begging for work.

The Five-sided Triangle. Careful study proved that the needs here could easily be divided into the same five categories as in India: spiritual, mental, physical, social, and economic. The Five-sided Triangle was just as applicable an emblem.

The Spiritual Basis. The people were almost all Roman Catholic, though they retained many of their ancient Aztec ways of religious thought. More than 90 per cent of the Mexican City YMCA members were Catholic. Its President was a Catholic; a part of our staff was Catholic, the rest Protestant.

We found here, as in India, that people could be convinced of the necessity of a spiritual basis for our work, and could be made to realize that its effects could not be permanent without this basis. People here, just as Hindus, Buddhists, Mohammedans, Catholics, and Protestants in India, could be convinced that it is a right thing to join together to follow the example of Christ Jesus as he went about teaching and helping the people upward from all their troubles. So we endeavoured to enlist them—little talk, no preaching, much service.

Mental. All rural reconstruction work is really teaching. We did not find that great thirst for learning we found in India, where such great numbers eagerly flocked into any class provided. Yet, 'What is the use of learning to read?' A logical question from those who finished school with the second grade, and had not had a book of reading matter come into their homes since. We saw the Government experience great objection from people in these villages when they ordered that each one who could read and write must teach one who could not. These independent, proud people took no orders. Men would not be ordered to teach their wives. Illiterate wives said positively:

'What good is reading to us? We are busy women, no time for that.'

We had better and very interesting success with the volunteer method. Our noon-hour classes, before everyone was tired out and when no one had to hurry home or to go somewhere else, ran short courses of a few weeks duration on any subjects the workers, either male and female, wanted. They all wanted more arithmetic. Under the guise of Spanish grammar, Piedad, the practical nurse, an excellent teacher, taught them much they ought to know about their living—Spanish grammar too. They liked history and geography. Our small daughter Jane's beautifully illustrated English primary reading books were very popular. Illiterate ones learned to read and write Spanish: thumb-marks disappeared from *Camohmila* pay receipts.

The reading table and the loan library answered the question 'Why learn to read?' The supreme mental and educational accomplishment was of course the learning by doing, going on all the time in the comprehensive programme.

Physical. When we arrived in the *Camohmila* area we found a terrible epidemic of typhoid fever. The good headmaster of the central school in the largest village (an able Indian leader among his own people) was much worried. His school numbered 800 pupils, girls and boys, yet had no sanitary facilities whatever. No latrines in the school, practically none in the village. The water of the springs and streams was polluted. The epidemic spread downstream to the other villages where likewise neither schools nor houses had latrines.

The bore-hole latrine which had met the situation in India would be the best solution here where the rocks would permit. Another type was planned for places where the borer could not penetrate. We soon put a borer into loan operation. We were pleased that when shortly after we visited the village of Tlacaltenco, ten miles above our centre, the people said 'Yes, we are interested in having sheep and learning to weave blankets, but how about those

latrines we've heard about? We haven't any and we need them.' Later the village of Tepetlapa installed in their new school house 'English Sanitation'. They diverted a part of the book, and now have flush toilets and shower baths in the school house.

During the first year we employed a full-time young doctor. He performed many services; inoculated large numbers of children and adults against epidemics. The fact that typhoid never again visited us was attributed to this. The Clinic at the new Centre was much patronized. Through the later years we have had a Mexican practical nurse instead of the doctor. On her horse, Durazno, she has responded to calls far and wide over the rugged hills, and dispensed relief and clinical aid—a 24-hour service. The intimate story of services rendered is a book in itself. Large number of mothers who never before had any help at the time of child-birth, and many other persons fervently thanked Piedad. This full-time nursing service has been supplemented by a group of young doctors, members of the City who have come to *Camohmila* on an every-other-Sunday schedule, bringing nurses to assist them.

Housing. It was the picture in the back of our minds of how the first model house back there at Martandam Centre was copied in the village of Vilivancode before the model was finished, that encouraged us to build one on the corner of *Camohmila* Centre. Here the burro-path divides toward different sets of villages. We worked out the plan with the villagers, built it inexpensively of adobe and moved a village family in. The scepticism our local advisers showed was wasted. From the foundation on, the little house attracted many visitors. Passers-by dropped in; and others made many special journeys. They liked the simple features which without much extra cost, made all the difference in more comfort and easier work. This house had windows, a floor that could be washed, and a stove-pipe to carry the smoke out. Then the light and brightness inside immediately captured their imagination. Lime rock was plentiful on the hill-sides, they knew how

to burn it, and could easily with practically no expense whitewash right over the adobe bricks inside and out as we had done. Soon we had a housing movement. The villages began to turn white with whitewash. Girls threatened not to marry unless their suitors agreed to build model houses. Remodelling for those who did not wish to build was a further result.

Social. The fiesta is deep in the blood of all Mexican folk. *Camohmila* in its social work could capitalize on this love for festivity. Perhaps it could help to put the village fiesta on a higher plane than the bullfight and the cockfight. True, there in the villages, the bullfights were not such exhibitions of cruelty to animals, as in the capital city. The *campesinos* could not afford to torture and kill the bulls, for they had to use their sprightliest and best working bulls. They excited them, made belief fight, then rode them. Once in a while a bull killed a boy. The cockfights, with knives tied on the legs, were brutal and sordid affairs, engaging the gambling fervour of the people at a fiesta where there was so little else to be interested in. Hard liquor from outside was brought into the villages on fiesta days.

On Friday afternoons we invited men, women and children to the centre from 4 to 7 o'clock for a small fiesta. Once a month we tried to have a bigger one. Exhibitions and competitions of the best rural products, something new for this part, fitted in well with the all-day fiestas.

In these fiestas we tried for a total participation, which was an enjoyable innovation. Too much of Mexican dancing and singing is too difficult for the untrained who can only sit and watch. We had simple entertainment, of games and easy folk dances in which all could participate as they did with great enjoyment.

As always in our work, the personal relationship of our staff and their families with the local people is an important social force. Here, after successfully passing through the gauntlet of suspicion, it was a great thing to be welcomed with literally open arms into every rural house; it

was a great pleasure to have large or small groups of villagers at our own adobe house for afternoon and evening parties. We have had as many as seventy-five sitting on the floor, with us—just enough room in the centre for 'skunk wrestling', or 'Are you there, Pat?' games.

The villagers need real friendship, and we too need it when we dwell with them there, in those isolated, rugged, eternal hills.

Economic. Everything needed improvement. No one would contradict that. Land first: it needed what would make it able to perform the 'miracle' I have already described. Land is life to the *campesinos.* They came forward to help us make the first compost, learning by doing. At *Camohmila* Centre it was a process of trying out, while the people watched. We tried a hundred kinds of field crops and vegetables, to find what kind would grow best; then to see what pests would come to destroy what would grow; then what could we do against those pests. The people kept on watching, and once in a while they would see something they wanted, something they thought was just the thing for them. And they wanted it quickly, with almost childish eagerness. This was our extension opportunity.

Here was a one tool country. Except for much hand weeding the small plough did everything. The *campesinos* watched us use the hoe, the cultivator, and the small disc harrow. They watched a long time, and finally began to borrow ours to try out: it was four years before a few came to buy, on easy payments.

Wild fruits. All over the hills were wild fruits—black berries, guavas, wild cherries, small peaches, and others which were not picked at all or were sold at a discouraging low price. These folk knew nothing of the art of preserving, had nothing to put preserves in, had no sugar. Mrs Hatch and her mother, Mrs Gilchriest, began making delicious jams and jellies in our own little kitchen. Men, women and children who brought the fruit helped—working outside on the grass. We saved the mango, which when

ripe became too wormy to eat, by making delicious chutneys and jams from the green fruit as we had done in India. This project became one of *Camohmila's* largest and most helpful. We left it with a beautiful little co-operative kitchen building of its own, paid for by spontaneous, unsolicited contributions.

Milk was a regular part of the diet of only a few families. Our Holstein and Jersey bulls, running in the common pasture, have accomplished well. So many of the cattle born during the recent years look like them. Good milk-producing strains of blood flow in the veins of these young cattle.

Likewise those best strains of Poland-China pigs are improving the local ordinary ones. The Grenadina milch goats, the poor man's cows, are giving good milk. Heavy shearing merino sheep to cross with the country ones, had to be brought from distant parts of Mexico. All the sheep had been shot out of this region during the revolutions.

Barred Plymouth Rock and Leghorns are improving the local chickens as in India. White Pekin ducks, graceful and beautiful, swim in *Camohmila* brook.

Cottage Industries. Strange as it seemed, this area which had the longest dry season we have experienced in any country, had no cottage industries for the spare time or inactive season. For seven months each year there came hardly a shower. There was no use digging in the earth, no chance to grow anything. If any people needed a cottage industry it was these.

We introduced weaving. There had been weaving on a simple belt-loom to which a few grandmothers testified. Boys and girls learned how to make good fabrics and useful articles in both wool and cotton on the simplest two-pedal looms we were able to buy in another part of the country. They learned the full gamut of a blanket from the sheep's back to the villager's back. For cotton fabrics, we used Mexican mill-made yarn on the fly-shuttle hand looms. We taught dyeing, and made beautiful products in colours. Rag rugs in combinations of colours were excellent for beginners and the few home looms. It seemed to take

several years before one boy finally caught the thrill of high quality production. When he did, his designs and products were of the best.

The Finest Product. Nowhere in all the world, I do believe, can anyone find a more attractive group of boys than those now living and learning at the *Camohmila* Centre. They come from over the hills, from villages where there is either no school at all or one of the two-grades limit. There with us they get all of our kind of training and influence, including learning by doing. They also can get six grades of regular schooling in Tepoztlan, two kilometers from the Centre. We have only boys living at the Centre so far, but girls who come in daily from the nearer village to take part in our classes and activities are just as bright and attractive.

These young folk, whose parents were at first afraid to let them come to us, are so happy in the new life they have found. They will be the leaders in those villages tomorrow. Nearly all of them are not going somewhere else. They are going right back there to the old villages to take the places of their fathers and mothers in the new day.

After these few years more requests are coming from over those long, high, relentless hills to come to help with this problem or that than we can ever answer. The Extension field is opening wide. In a country of long, rugged, slow trails, we need many helpers.

The Centre-with-Extension idea has begun to spread in the Western Hemisphere. Dr M. L. Wilson, Director of Extension in the United States of America, writes: 'I am greatly gratified that your station may become the Centre of development of what I call the Spencer Hatch approach; and for applied cultural anthropology as a basis for educational activities with people who have different cultures than our own.' He refers to the fact that Mrs Hatch and I have been invited to establish Extension Education

Services for the Inter-American Institute of Agricultural Sciences under the Association of American States and the Pan-American Union. We are told the same pattern of approach is needed in the other American Republics. The Institute, our new station, is in Costa Rica, a truly beautiful country, central to all the Americas.

Here we are already engaged in developing the Extension Education Services, which include wide extension connexion, with member countries of North, Central and South America, and with the Caribbean Republics and Islands. Here I can have any possible helpful connexion with any country anywhere. I continue as a Chairman of the Rural Work Committee of the World Alliance of YMCAs with headquarters in Geneva, Switzerland.

Here a new centre called *Noche Buena* with Extension services out among Costa Rican farmers, after the pattern of Martandam and *Camohmila*, is developing. And we have begun to train students from the different countries for rural leadership.

We call this training Applied Rural Science. For that is exactly what we are aiming to do: to train carefully picked young people, to take the valuable results of scientific research out to rural people and to help them to apply these values to their own living and agriculture. This can help to bridge the regrettable gulf that exists between scientific findings and farm practice.

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MOVING PICTURES

(Illustration on these Services)

Give us the Earth, written and produced by Herbert Morgan; directed (at *Camohmila*, Mexico) by Gunther V. Fritsch in 32 mm. and 16 mm., Metro Goldwyn Mayer.

The Martandam Story, written and produced by Emily Gilchriest Hatch and D. Spencer Hatch, International Committee YMCA.

The Mexican Story, written and produced by Ira and D. Spencer Hatch, 16 mm. International Committee, YMCA.

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