CD158
23

Rural Reconstruction in Action

Experience in the Near and Middle East

Office of the
Training Centre for Village Guides,
Gandhigram.

RURAL RECONSTRUCTION IN ACTION

Experience in the Near and Middle East

By H. B. Allen
Director of Education
Near East Foundation

CD158

Compliments of
THE FORD FOUNDATION

Cornell University Press
Ithaca, New York

Copyright 1953 by Cornell University

Cornell University Press

London: Geoffrey Cumberlege

Oxford University Press

FIRST PUBLISHED 1953

Printed in the United States of America by the

Vail-Ballou Press, Inc., Binghamton, New York

To My Mother, in Her Eighty-sixth Year

Foreword

MOST of the population of the world is rural. That fact should be kept constantly in mind as the reader follows Dr. Allen's vivid, authentic account of rural reconstruction in action. Dr. Allen has a message for all those who are concerned with helping rural people to help themselves. The Near East Foundation, of which he is director of education, has been a great pilot enterprise in the field of Point Four and in the development of extension education in agriculture and home economics.

In this book Dr. Allen has done a very able job of systematically bringing together the varied experience of the Foundation and of certain other agencies and distilling from this experience broad general principles. These principles should apply, with modifications, in any culture in the world. He has derived these principles from vast experience in helping rural people in the various countries of the Near East and has illustrated these principles with concrete examples based on this experience.

His book should be of practical value to anyone interested in assisting underdeveloped countries to develop extension education. Its main theme is that all education should be built around four aspects or essentials of individual and community life—the economy, the home, health, and recreation. It emphasizes the basic concept of leading to gradual change from within rather than imposing drastic change from without, on starting with the material at hand—tradition-bound minds, primitive conditions, and limited resources

—and then from this point of departure gradually introducing improved practices on the farm, in the home, and throughout the community.

The free nations of the world, linked together through the Food and Agriculture Organization and other United Nations specialized agencies, appreciate the grave necessity of a rapidly rising standard of living for all peoples. The governments of the free nations recognize in various ways their responsibility to help their people to have the security and well-being which come from an ample food supply, better health and housing, better education and family life. The specific problem is how this development can be set in motion in the shortest time so that significant improvements will demonstrate that these goals are attainable. For these reasons the development of extension work in agriculture and home economics is now a world-wide phenomenon. Not only is our country assisting many countries with unilateral Point Four agreements, but FAO is assisting most of its sixty-odd member countries in various ways in developing extension services and extension programs.

I feel personally indebted to Dr. Allen as being the first one to stimulate my interest in the development of extension work in other lands and to initiate me into the world-wide fraternity of extension workers. In 1938 I served as a member of the United States delegation to the International Institute of Agriculture, which met in Rome that year. Mrs. Wilson and I returned by way of Greece and the Balkans and spent three or four days in Salonica; there we met Dr. Allen, who showed us the extension work being done under the auspices of the Near East Foundation in villages in Macedonia.

Having pioneered in agricultural extension work in Montana prior to the passage of the Smith-Lever Act, I was impressed with the pioneering being done under Dr. Allen's creative imagination and direction. We saw practical field demonstrations of improved agricultural practices on small farms; we talked with local leaders who could tell an accurate story of what they were demonstrating and the know-how connected with it. We visited humble homes in which the homemaker, through an interpreter and by friendly gestures, pointed out some of the things she had done for the health of the

family as a result of the village improvement program. We talked with young people who were beginning group participation in a community program. We thought we saw certain of the principles, with which all pioneer county agents and extension workers in the United States worked, being adapted to a village form of rural life in a culture very much different from our own, but yet in a way that gave great promise if peace and time would permit their development.

Dr. Allen has performed a great and important service in formulating methods, as exemplified in this book, to assist underprivileged countries in rapidly developing extension services and in pointing out sound basic principles and how these principles work out in actual living communities. Much of our writing and talking about the development of extension work in other areas of the world has necessarily been in general terms, and there has been only limited experience to draw from.

The case method of teaching is coming into more or less wide use in professional training. The case approach deals with reality, with actual situations and with human behavior within these situations. It includes both theory and practice. Dr. Allen has done a workmanlike job in drawing out the most valuable experience of the Near East extension work and organizing it in the form of cases and situations such as are going to be met in all countries in the process of developing extension work within the framework of the pattern of living of the people.

This book should be invaluable to the general reader, to the student, to the administrator, and to all those who are interested in the process of training village and extension workers anywhere in the world.

M. L. WILSON
Director of Extension Work
U.S. Department of Agriculture

Washington, D.C.
November, 1952

Preface

ONE of the critical problems facing the world today is that of assisting the millions of human beings who live in depressed areas to achieve decent standards of living. Even those who dwell on the land close to the source of most food supplies are in need of such assistance. In fact, this group of workers makes up the bulk of the population in all those regions which are commonly rated as underdeveloped.

Improperly clothed, poorly housed, undernourished, diseased, illiterate, and frequently exploited, these people are becoming increasingly restless and with good reason. Modern systems of transportation and communication have brought all parts of the earth so much closer together that even the most isolated communities have discovered that a better life prevails in the more favored spots of the world. Many have convinced themselves that no state of existence could be worse than that which they daily experience; the result is that they grasp at any straw in the wind which promises salvation. Communism is one of those straws today held temptingly before them.

Capitalizing on human misery, with no intention of improving conditions, Communist propaganda has become a powerful instrument for instigating unrest and a clever device for exploiting still further those who are already oppressed. The tide must be stemmed and as quickly as possible. If the threat of communism with all of its false promises succeeds in making us of the Western world more

conscious of the necessity for immediate action in solving some of the basic problems of want and disease, it will have made an important contribution to man's slow upward progress.

Of late there have been signs of increasing awareness of this complex and dangerous situation. Here and there a few well-conceived demonstrations have shown that even those with very limited resources can provide for themselves a much better life. Private agencies or determined individuals with unusual vision have been chiefly responsible, until recently, for most of these helpful beacons. But interest in this field of endeavor is rapidly growing. Certain activities of the United Nations and its agencies, a few of the technical assistance programs of the United States Government, and the community development efforts of the British Colonial Office are evidences of the trend. Underlying some of the belated interest and activity is the theme of helping deserving people to help themselves. Not all of these attempts are entirely successful, worthy as they may be in their basic objectives. However, there is now proof in abundance that much can be achieved when the procedures are sound.

Rural Reconstruction in Action presents some of this proof while pointing out those procedures which lead to success. The examples that are cited were chosen with this objective in mind. Moreover, the various chapter headings and the order in which they are listed are intended to serve the same purpose.

All of the projects selected for review have their setting in that loosely defined geographical area known as the Near and Middle East. This happens to be the region with which I am most familiar. It is also to be expected that I should draw heavily from the overseas programs of my own organization, the Near East Foundation, since I have an intimate knowledge of all these efforts. Then too, membership on a number of national and international missions has enabled me to follow closely the development of significant experiments entirely outside my regular duties. Several of these have been useful in emphasizing important points. Naturally this limited treatise makes no reference to many fine pieces of work that are to be found both in the Middle East and in other parts of the world.

Many organizations with limited means find it necessary to re-

strict their activities to demonstrations. Even national and international bodies with their greater resources and more ambitious schemes have lately followed the practice of promoting pilot projects in the hope that this more concentrated approach will provide the experience, the trained leadership, and the inspiration for continuing effort on a much wider basis. The discussion that follows is, therefore, confined largely to the problems and procedures involved in organizing and directing rural demonstrations of modest proportions.

Raising the economic, health, and home standards of any retarded group is not an easy matter. The task becomes especially difficult when undertaken among those whose lives have been more or less static for hundreds of years. Traditional ways cannot be changed in a day. Nor is it wise to attempt such speedy reform. But a thoughtful, intelligent, systematic approach will lead rather quickly to measures which can be vigorously and successfully promoted.

When the cautious, hard-working peasant discovers, frequently to his surprise, that the community leaders are sympathetic, understanding, and practical, his response is enthusiastic. With the prevailing situation, whatever it may be, as the point of departure and, to begin with, the few who develop faith in the improvements recommended, results soon appear, gather momentum, and before long have far-reaching effects.

Successful demonstrations in rural improvement, wherever they happen to operate, tend to draw heavily on certain basic principles. This is true of the projects described in the following pages. These were selected from widely separated areas, and each example submitted was chosen to emphasize a particular concept or set of ideas. The complete text constitutes a series of lessons which I trust will prove useful to those who are interested in the development of retarded areas of the world. The problem is one which, in these critical days, demands immediate and thoughtful attention.

I shall not attempt to list all the good friends who helped in numerous ways in the preparation of this book. Many of these people are referred to by name in the pages that follow. Practically all of those who are mentioned in the body of the text as chiefly responsi-

ble for the projects described cooperated generously in checking on the facts presented and offered many constructive suggestions. This is an appropriate time and place to express my sincere thanks for their help. Without such assistance I could not have completed the task.

In addition to those whose names appear prominently in the text there are a number of others to whom I am deeply indebted for reading portions or all of the manuscript and suggesting improvements in the order of presentation, the elimination of extraneous material, or the need of stressing a point harder. Particularly helpful along these lines were Miss Elizabeth Brommer of the Oxford University Press, Professor Lincoln D. Kelsey of the Extension Service of Cornell University, and Dr. John H. Reisner of Agricultural Missions, Inc. I am especially grateful to Dr. Joseph H. Willits, Director of the Division of Social Sciences of the Rockefeller Foundation, for reading and appraising the manuscript while it was still in the rough and for the encouragement he gave to me to complete the task. And finally there is my secretary, Miss Wilma Horen, who has assembled material and typed and retyped endless pages far beyond the bounds of ordinary duty in order that this extracurricular activity of mine might be completed.

H. B. Allen

September, 1952

CD158

Contents

	Foreword, by M. L. Wilson	vii
	Preface	xi
I	Start by Improving the Farming [IRAN]	1
II	Deal Promptly with Question of Health [GREECE]	26
III	Improve the Home Practices [SYRIA]	41
IV	Include Recreation [LEBANON]	61
V	Attack the Problem of Illiteracy [ERITREA]	81
VI	Operate a Total Program [MACEDONIA]	96
VII	Organize Farm Schools with Caution [ALBANIA AND CYPRUS]	124
VIII	Make the Rural School Rural [PALESTINE]	142
IX	Apply the Latest in Science [GREECE]	164
X	Develop Capable Leaders	185
XI	Make Haste Slowly	191
	Index	199

Illustrations

	Facing page
Ali Saeedy and Director Noe at Their Mamazan Well	12
Village Women at the Mamazan Well	12
Poultry Houses Constructed of Mud	12
Noe's Crew Spraying with DDT	13
Iranian Soldiers Fighting Mosquitoes and Flies	13
Natives of Baluchistan Spraying Their Tribal Area	13
A Stall at a Village Bazaar	44
Adult Class in Reading and Writing	44
Women Rolling Drums of Water into Magoula	44
Donkeys Carrying Water for Magoula	44
Blessing New Water Supply for Magoula	45
Apostolos Koskinides and Two Ardent Supporters	45
The Babbila Center's Garden	45
Miss Sawaf Showing Off Pupil's Dress	45
Girl Students at the Babbila Center	45
School Building at Makerka, Eritrea	76
Adi Caieh School for Boys and Girls	76
Spinning and Basketmaking Class at Asmara Girls' School	76
Classroom in Village of Merrara	76
School Team at Sports Rally in Eritrea	77

	Facing page
Summer Day Nursery of the Macedonian Program	77
Eritrean Government Employees Learning to Type	77
Sophia Kyriakou of the Macedonian Program	77
Supervisor Moussouros and Agriculturist Theodorou	77
Albanian Farm-School Graduates	108
Father-and-Son Day at Albanian School	108
Albanian Peasant Home	108
Double-Unit Cottage Dormitory	109
Buildings of Albanian Farm School	109
Malaria and the Mosquito Explained to Albanian Villagers	109
Director Ralph Allee with Visitors	140
Village Chiefs Wearing Skanderbeg Coat	140
Dr. Tatiana Zlatkova in Albanian Clinic	140
Cyprus Farm-School Students	141
Cyprus Farm-School Boys in Dormitory Living Room	141
High-wheeled Oxen-drawn Cart of Albania	141
Greek Farmer Looking through Microscope	172
"Parnon," Sire of Many Offspring in Greece	172
Graduates of Artificial-Insemination Course	172
Village Schoolmasters in Course at Tulkarm	173
Teacher Training College in Palestine	173

Rural Reconstruction in Action

Experience in the Near and Middle East

[CHAPTER I]

Start by Improving the Farming

[IRAN]

THE starting point—in the life of a rural demonstration as in other fields of human endeavor—is of vital importance. It is during this early stage that the foundations are laid for later expansion. This also is the time when the confidence and trust of the people whom the demonstration is intended to serve must be won. The farmer in the Middle East has to make his living from the soil with a minimum of equipment and with tools which have changed little for centuries. It is only natural, therefore, that any organized effort to raise his standard of life and to win his confidence is most likely to succeed if it begins by improving his farming in simple but practical ways.

Thus the demonstration in Iran began. The history of this project is here given in considerable detail since it shows how simple improvements of agricultural practice will lay the foundations on which a more comprehensive program can be erected.

Iran has long been a predominantly agricultural country, and most of its inhabitants are peasants and shepherds. These people of the hills and the plains have produced the major proportion of the national income. Yet these millions, who contribute so much to the nation's economy, are deprived for the most part of medical attention and educational facilities, are left without guidance in agricultural matters, and live throughout most of the land under a type of feudalism which may well be termed medieval.

In 1943 I visited Iran and spent six months investigating rural conditions in all parts of the country. Soon after my visit, the Near

East Foundation received an official request from the Government of Iran to undertake work in that area. The Board of Directors of the Foundation indicated in their reply that the invitation would be considered, but that the matter would have to be thoroughly studied before definite action could be taken.

Several serious problems had first to be solved. Any activity in Iran of the type envisioned would require more than the usual amount of pioneering. Furthermore, persons capable of undertaking this kind of work are always hard to find, and especially so in this case. Finally, it would be necessary to work out in advance a carefully prepared agreement between the Foundation and the Iranian Government specifying the contributions each of the two parties involved were to make. Given such an agreement, the project would be truly cooperative from the beginning and the Government of Iran would be sure to implement its request by active support of the program.

An intensive search for a qualified man to head the demonstration was soon under way and continued until Lyle Johnson Hayden was found. Lyle Hayden's background and education fitted him ideally for the job. Farm reared, thoroughly trained, and highly experienced, he possessed also certain personal characteristics which are essential for successful rural work on foreign soil. Having started his professional career as a teacher of vocational agriculture, he had moved steadily ahead in the field of rural education until he was directing a large country high school. Always active in community affairs, he was understanding and patient in his relations with the farmers and their sons. These are worth-while qualities in any part of the world.

When the war broke out, Hayden carried his talents to the Navy. Released from military duty in June, 1945, he proceeded at once to Cornell University, where he submitted his delayed thesis and thus completed the requirements for his doctor's degree in rural education. A tour of Egypt, the Sudan, Palestine, Cyprus, Lebanon, Syria, and Iraq, to observe conditions and study rural projects, completed his preparation for the Iranian assignment.

In the late fall of 1945 Hayden arrived at Tehran, but there were

many difficulties to be overcome before the program itself could be started. Besides, Hayden had first to familiarize himself with the country and the people among whom he was to work.

In the meantime a committee of Iranians and of Americans resident in Iran and interested in the welfare of the country was appointed to assist in the preliminary drafting of a tentative agreement between the Foundation and the Iranian Government. This draft outlined briefly and concisely the purpose of the proposed demonstration and the contributions to be made by each party. The committee took care to propose only such measures of assistance on the part of the Government as could be approved by the Council of Ministers without special legislation. This eliminated at least some stumbling blocks which could have caused further delay.

However, the suggested agreement was as yet merely on paper and had still to be signed. Anyone who has ever attempted to negotiate such a contract, however informal, in the East will have some understanding of the problems involved. Iran proved to be no exception. Finally, with patience, persistence, and the help of good friends, the contract was signed. It represented even a better and more cooperative arrangement than the original draft, for it included a generous cash subsidy from government funds as tangible evidence of official support, while leaving to the American organization complete independence of action.

During the several months required to complete these negotiations, Hayden found many opportunities to travel widely all over the country. He talked with officials, missionaries, teachers, and peasants. Gradually his thoughts crystallized, and he formulated in his mind the broad outlines of his plan of attack. By the time the agreement was concluded in June of 1946 and he was able to proceed officially, Hayden had determined on the place where the demonstration was to be located.

The selection of a suitable area in which to develop the program was no easy matter. It would need to be in a region fairly typical of rural Iran, away from urban centers yet near enough to the capital to exert some influence on officialdom. There were also a number of other factors to be considered. Readily available were villages

controlled by rich landlords, most of whom were absentee owners. Some of these were anxious to improve the lot of their farmers and desired expert guidance. To work through such channels, however, would have meant becoming an integral part of an outmoded system. There were also the public domains, but the farm tenants of these properties were victims of a bureaucracy which might easily handicap any educational effort. The ideal situation would be in settlements where the small agricultural plots were individually owned. Here one would find real incentive for improvement. Such holdings were rare and scattered in Iran and would be likely to take one to isolated localities entirely unsuitable for purposes of demonstration, at least from the point of view of publicizing the results achieved.

Hayden solved this dilemma in a practical fashion. He discovered one day, in the district of Veramin about twenty-five miles from Tehran, five small villages owned by a charitable organization, the so-called Veramin Endowed Properties. The estate was administered by a special committee, and the revenue derived from the land was used to support a girls' orphanage. In such a setting Hayden saw that he would be working, theoretically at least, with active, altruistic members of a progressive group. Any improvement in living standards of the tenants would be welcomed by all concerned, and an increase in income from better agricultural practices would benefit both the farmers and the worthy cause financed by this committee. It was an excellent setting for a demonstration in rural improvement in Iran.

The Veramin Committee was favorably disposed when the proposition was presented to it, and a contract was drawn up. The agreement is noteworthy because it included several unique items. The Near East Foundation undertook to develop a program designed "to increase the revenue to the farm tenants (and likewise the orphanage) and to improve the living conditions of the villages." The Committee agreed to provide, rent free, at least one room in each of the villages for the purpose of conducting primary schools, adult classes, clinics, and similar activities pertaining to the demon-

stration. Supplies, equipment, and maintenance for such centers would be financed by the Foundation.

Adjoining the village of Mamazan, one of the five villages, there was a ten-acre garden enclosed in a manner typical of the country, within mud walls. This plot together with an additional twenty-five acres outside the enclosure was, under the agreement, rented to the Foundation for the equivalent of $250 per year. It was anticipated that certain farm buildings and inexpensive model homes for the staff would be constructed. Such construction would be directed by Hayden but would be financed by the Veramin Committee, and the buildings would remain its permanent property. Rental paid by the Foundation would amortize the original costs in ten years. At the end of three years, however, either party could terminate the contract with six months' notice. Should the official agreement with the Government, for some reason, become nonoperative, the contract with the Committee would automatically terminate. In this event the Foundation would pay a final six months' rental from the termination date. These are a few of the items in the detailed memorandum which was drawn up and duly signed.

Hayden decided that the village of Mamazan should be the center of his radiating activities. Here on his two plots of land he would conduct his agricultural experiments and carry out a few practical experiments in crop and animal husbandry; and here his workers would live among the people they were trying to serve. Hayden had already discovered that such agricultural stations as existed in Iran, and there were several, provided relatively little practical information sufficiently reliable to be passed on to farmers. It would therefore be necessary to conduct his own basic experiments which would enable him with safety to recommend sound improvements. Field and vegetable crops commonly grown by the peasants could no doubt be greatly improved with carefully tested new varieties. Certain enterprises unknown to the area might be introduced for better distribution of labor, more efficient use of seasonal irrigation, and increased production. Some of the traditional farming practices could obviously be bettered. The native

livestock might gradually be converted into higher producers by proper selection and breeding. Moreover, there would have to be some procedure for bringing such useful knowledge within the reach of the mostly illiterate inhabitants of the area.

The program here briefly outlined was launched with a minimum loss of time. In the midst of his many tasks, all demanding attention at once, Hayden began putting up the few modest buildings required by his plan. In addition, he was constantly on the lookout for young men who would, after being trained on the job, become good rural leaders.

Hayden knew well what was the most important qualification required in his workers. Whenever he had an applicant before him, he would ask him first of all whether he was willing to live in a village. If a man could answer that question in the affirmative and without hesitation, then the interview would be prolonged to deal with certain other important conditions. Was the candidate motivated by a spirit of service; did he possess an inborn love of the soil; was he sympathetic and understanding towards the common villagers; could he appreciate their hard, and fairly successful, struggle for an existence notwithstanding their limited facilities; was he willing to learn not only from Hayden but from the unlettered peasant? Did he have a healthy respect for manual labor? If the answer was "yes" on all these counts, Hayden knew that he had found the type of man he wanted. All other requirements could be added at a later date.

Rather early in his search for potential leaders, Hayden found one young man who seemed to have possibilities. He had worked for several years as interpreter and assistant for an American adviser to the Ministry of Agriculture on soil and water problems. During his period of service with this specialist the young Iranian had lived close to an authoritative source of valuable information. In the company of his employer he had traveled widely throughout the country and had absorbed considerable knowledge. When the American completed his assignment in Iran, he bequeathed his assistant to Hayden. Hayden was looking for practical assistants, and the young man in question was sure he would like to be associated

with another American. But in his eagerness for the new job he failed to appreciate fully all that it would involve. He was now required to work with the villagers and not for them. And he must live in the country—in comparative comfort, to be sure, by Iranian standards, but with all the inconveniences and lack of urban amenities which such a life implied. After a few months of this our Iranian friend had had enough.

Finally, however, Hayden's search for young men with a vision was rewarded. He found Shaybani and Saeedy.

Feridoon Bani Soleiman Shaybani had graduated in 1939 from the American College at Tehran, which was called Alborz after the high mountain range of northern Iran. While there he had come under the influence of Dr. S. M. Jordan, President of Alborz, an elder statesman of Iran by adoption. Through forty long years of devoted service to the youth of Iran, Dr. Jordan had come to be known and respected throughout the length and breadth of the land. Possibly the influence of this great teacher accounted in part for Shaybani's ambition to serve his country. Along with that he had an inborn love of the soil. Even while pursuing his studies at Alborz, Shaybani had dreamed of becoming a farmer one day. As there was nothing of this kind at the college, he had enrolled in several correspondence courses in agriculture with British and American institutions. Eventually he acquired in northern Iran several hectares of his own land.

Shaybani's modest estate was mostly woodland, but he cut down the trees, planted citrus seedlings, and started to grow tea. He also raised ducks. Just when these projects began to prosper, however, the situation in northern Iran became highly dangerous for a patriotic Iranian and a "capitalist" landowner.

And so Shaybani had to leave and return to Tehran. With his knowledge of bookkeeping he soon found employment with the Ministry of Finance. At the first opportunity he transferred to the Department of Agriculture, where the work was at least to some extent related to his personal interest. There, in the summer of 1946, Shaybani first heard about the Near East Foundation. He wrote Dr. Hayden, saying, "I would like very much to work under

you in order to have an opportunity to learn more about farming."

A young man who wanted a job in order to learn! This sounded promising. Hayden applied his usual tests, but the man seemed undeterred. Asked whether he was willing to live in a village, he showed not the least disappointment. Thereupon Hayden arranged with the Ministry of Agriculture to have Shaybani assigned to the Near East Foundation.

It was a year or so later when I myself first met Shaybani. He and his young wife, who was expecting a baby, lived in the home which he himself had helped to construct a few months before in the Mamazan garden. Down the lane a few yards away was another new house, the home of Saeedy.

Proudly Shaybani showed me around his agricultural domain. There was the two- or three-acre vineyard which was gradually being brought under cultivation. A late frost had killed the current season's crop, and Hayden was interested in finding out whether this was a common occurrence; if so, he would certainly advise against the growing of grapes in this area. There was the experimental vegetable garden, with several new varieties as well as various culture and fertilizer tests. One area was divided up into small sections for garden plots assigned to the older boys from the school at Palishth, about half a mile away. The village of Palishth was the only one of the five villages which could boast of a school at that time.

Finally, there was Shaybani's pride and joy, the new poultry house, in which he had a flock of sixty or seventy laying hens. A number of these were excellent White Leghorns, bred from good cockerels brought down from the north of Iran; others were native types of various sorts picked up locally. Hayden and Shaybani were not a little surprised at the laying ability of several of these birds. The building itself with its mud-brick construction and its wide open front was an excellent Iranian adaptation of modern poultry housing.

Our tour of the center took us to two more new buildings. One was a newly constructed machine shed, which provided ample space for storing hand tools as well as the heavier farm machinery, and

just inside the gate was the recently completed gardener's home. It was a modest affair, but with its three little rooms, a few well-placed windows, and its neat appearance it was a great improvement on the hovels that usually house farm laborers and their families in Iran.

The first time I saw Ali Saeedy in action he was covered with grease and caked with mud. Hayden, with whom he was working, looked very much the same. Together they were attempting to repair a balky pump which refused to work. Some time before, with the aid of a drilling concern, a deep well had been sunk and, in this community of little rainfall, the farmers were anxiously and eagerly awaiting delivery of the precious water. The reputation of the Near East Foundation was at stake. After much trial and error, the trouble was finally located, a new pump installed, and the water sent out over the dry and thirsty land.

As I watched Saeedy earnestly at work, intent on solving this practical problem, I knew at once that Hayden had found another good man for his slowly growing staff of rural leaders.

Ali Saeedy had graduated from the Technical Institute in Tehran and had received a good grounding in mechanics. This school was operated by Germans until the outbreak of war, and the instruction was thorough. Saeedy had a real liking for out-of-door life and therefore, after finishing school, he returned to his village, where his father owned land, to try his hand at farming. But a serious attack of malaria eventually drove him back into the town. He found a position in the Ministry of Public Works, and it was there that, early in 1947, Hayden discovered him. He seemed to be a young man with just the right background for training in the practical problems of rural sanitation and water supply, and, when approached, he showed great interest. Hayden arranged his transfer to the Ministry of Health, from which it was fairly easy to have him assigned to the Near East Foundation. Soon Ali Saeedy was installed at the Mamazan center.

With Saeedy and Shaybani, Hayden had the nucleus of a staff. It is not always easy to find workers who are able, and willing, to meet the requirements which Hayden so aptly summarized in his

few simple questions. Careful search will, however, always bring to light some who are anxious to improve the lot of their countrymen when they have a real chance of doing so. They must then be given careful training and be encouraged and rewarded when they show progress. The two men Hayden had found were unusually well grounded and well educated. Formal education, however, is not an indispensable qualification of the worker in rural communities. A ready understanding of the village farmer and his problems is often more important.

The addition of Amir Birjandi, an experienced schoolmaster from the provinces, who was to promote elementary education and to serve as a link with the Ministry of Education, completed the necessary staff at this stage of the program.

It is difficult to present a clear picture, chronologically at least, of the gradual unfolding of the new demonstration and to say precisely at what point its influence on the surrounding communities began to be felt. Nor is it easy to draw a line between where Hayden's agricultural activities left off and where his many other vital interests began. Although he was essentially a farmer and a rural educator, his training and experience enabled him to seize every opportunity that presented itself for improving home and community life. He had no need to wait for experts. These could be added later after he himself had explored the field and was sure of where help was most needed.

Surprisingly the agricultural activities began to have a certain amount of influence during the very first season in 1946—before the Mamazan garden was sufficiently renovated and before the small-scale experiments had produced noticeable results. Perhaps this was due in part to Hayden himself, who was soon accepted as a practical farmer, and to Shaybani, who lived in the village and had developed close ties with his neighbors. Both scrupulously avoided ever giving the impression of "showing the peasants." There was no model farm. It was emphasized that this initial phase of the program consisted merely of experiments to get at the facts and that the few practical units of crop and animal husbandry were carried on alongside those of the farmers of the community in order to gain first-

hand experience. Nevertheless, it was soon noticeable that little improvements were adopted by one villager and then another with hardly a word of comment.

In the field beyond the garden, Hayden and his helpers had planted wheat and barley. By way of experiment they had prepared the soil more than was usually done in this area, and they had used a seeder. An adjoining piece of land was planted with the same crops by one of the villagers, but the soil preparation and the seeding of the grain followed traditional methods. The seed also was the same, and both plots of land had equal amounts of irrigation. At the end of the season the crops grown on the Foundation's plot were, both in yield and in quality, superior to those produced by the peasant. Hayden himself had not expected quite such spectacular results, and his neighbors began to ask questions. The method of seeding and a few improved steps in the preparation of the soil had made all the difference.

On another piece of land Irish potatoes were planted just to test out a new crop. For some unexplained reason potatoes had never been grown in this area. A neighboring farmer who had been watching the process immediately found himself some tubers and put in a crop of his own. In this instance the Iranian farmer was much more successful than his American neighbor, and he was exceedingly proud of his achievement. The outcome of this little venture was that the Foundation had made another good friend among these conservative villagers, but the results might easily have been otherwise. Hayden decided that hereafter the nature and purpose of the agricultural experiments must be more carefully explained to the local inhabitants, so that they would not be too critical of an occasional adverse result. However, most of the experiments proved to be successful.

Although tomatoes and eggplants were found to thrive on this soil and there was a demand for these vegetables on the Tehran market, they were seldom grown in the Veramin district. The center provided a young villager with some good seeds and persuaded him to try them out on a small plot near his home. He used a place near the village compound where animals had frequently been tethered,

and the soil was rich. The young farmer had a fine harvest; he sold a part of his crop and exchanged the rest for a supply of wheat which he needed at home.

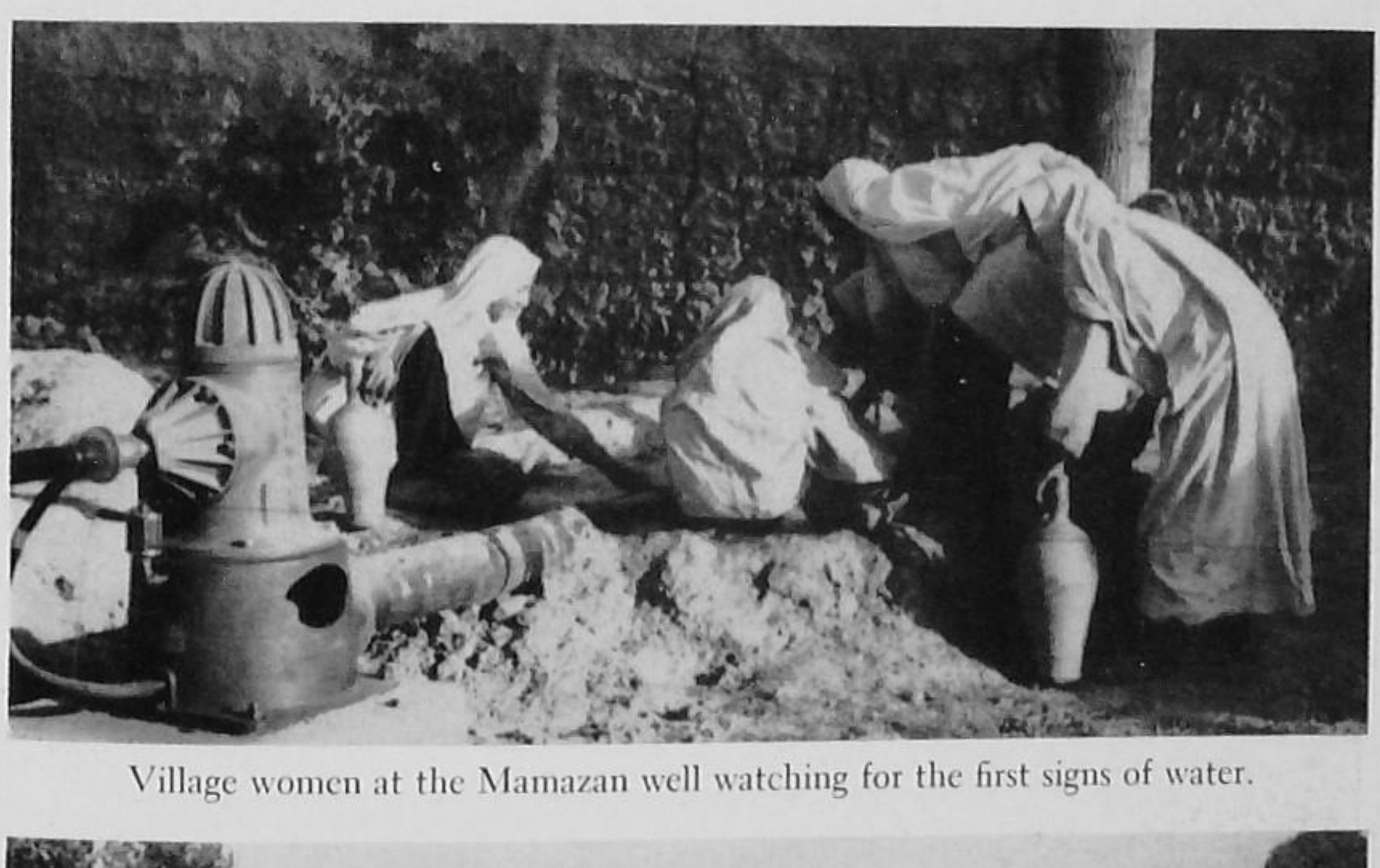
The hoe commonly used by many Eastern peasants, including those of Iran, is a heavy, unwieldy thing. If the tool can be lifted into the air, it makes quite a dent when it hits the soil, but it takes as much energy to raise the instrument as it does to break up the ground. Most Westerners are overcome with fatigue just from watching the process. Hayden soon introduced the light American hoe for use around his own domain. It was not long before he discovered one day that an observing Iranian neighbor had improvised a similar tool for his own use.

As the poultry enterprise at the Mamazan headquarters began to develop, Shaybani encouraged farmers from the surrounding countryside to bring in their scrubby roosters to be exchanged for good males. It required only one generation to reap the benefits of this simple operation.

One day Hayden discovered that the Ministry of Education had somehow acquired possession of a new tractor "for use in connection with one of its agricultural schools." This seemed surprising as the Ministry maintained no schools of this kind, and by applying a little diplomatic persuasion Hayden managed to secure the tractor for his own demonstration. He knew just where that machine could be put to good use. In a certain section of the Veramin district were fifty hectares of good land lying idle because of the lack of oxen to plow. The season was fast advancing. Hayden decided he could prepare the land for the owners and at the same time train a few eager young villagers as tractor operators. The farmers gladly paid 200 rials (about $4.00) per hectare for this service in addition to supplying fuel and oil, and as a result a good crop of melons was produced on this land. Moreover, in the process of preparing the land, six young men were trained as tractor drivers. As their efficiency increased they were paid accordingly, so that by the time the job was done and their training completed they were drawing the customary wage of a tractor driver, which is double that of the ordinary laborer. There were plenty of opportunities for these men to find



Ali Saeedy and Director Noe checking on the flow of their new Mamazan well.



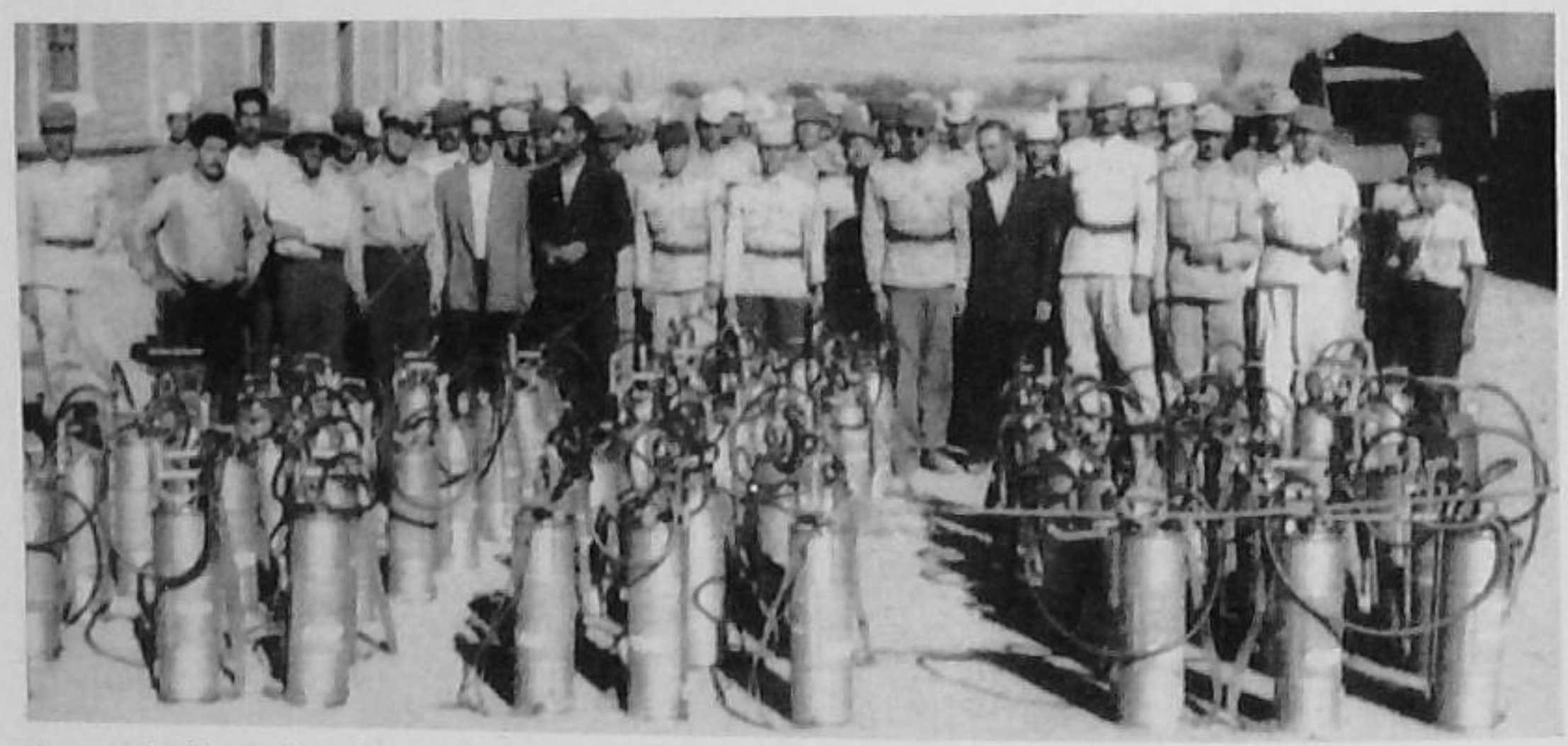
Village women at the Mamazan well watching for the first signs of water.



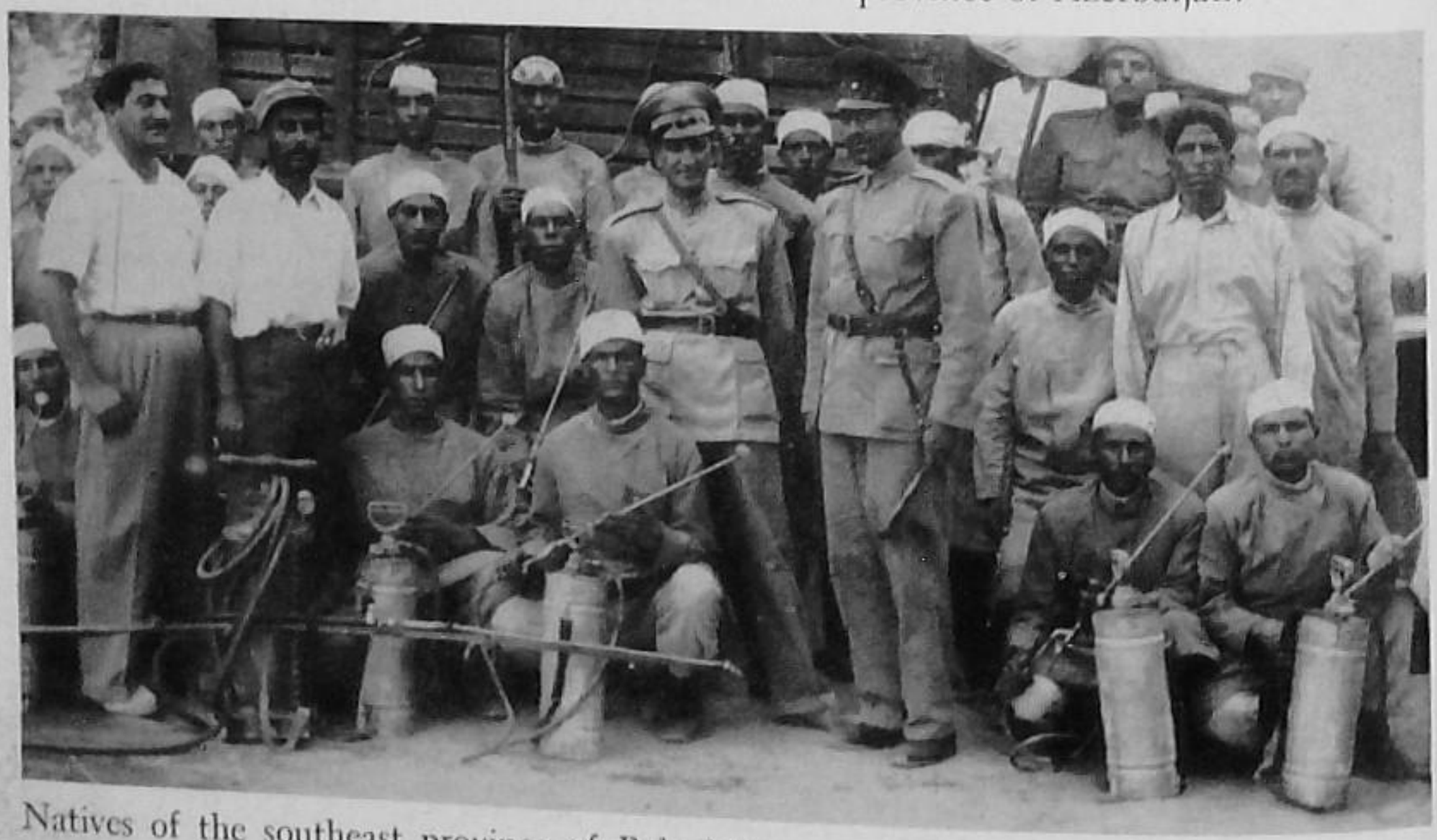
Poultry houses were constructed out of mud dug up on the place.



The woman of the house remained in the background while Noe's crew DDT'd the place.



A squad of one hundred Iranian soldiers was organized by one of Noe's sanitation leaders to fight mosquitoes and flies in the northern province of Azerbaijan.



Natives of the southeast province of Baluchistan were organized and trained to spray their tribal area.

work, since many of the large landowners and government agencies had farm tractors but few men capable of operating and maintaining them properly. This little project greatly impressed the practical-minded village farmers and made them realize the importance of the demonstration program.

Gradually Hayden turned his attention from things agricultural to problems of a more general nature. Most of his early activities related directly or indirectly to farming, but a comprehensive, all-round program of rural reconstruction eventually must take in all aspects of village life—sanitation, health, education, and, finally, home management. Progress in these directions was slow at first, but became more rapid as the Foundation's agricultural work began to win the confidence of the people. In fact, the greater the contribution to farming, the more rapid was the advance in other fields.

Throughout most of Iran, except in the north, water is scarce, and the whole standard of living in rural Iran is determined, to a considerable extent, by the amount of available water, whether from rainfall or from underground sources. The area of the Foundation's demonstration was no exception to this, and early in his pioneering days Hayden had realized that he must tackle this problem if he was to be successful.

Drawing on his own practical knowledge of geology and hydrology, he studied the problem and consulted several experts. As a result he became convinced that water could be found under most of his villages if one went down far enough. It so happened that at this time an American well-drilling outfit was operating in Iran. Hayden was able to reach the manager and took him out to the Veramin district. Mr. Richards was a hardheaded Westerner who knew his business well. After looking the situation over with his practiced eye, he offered to undertake at a fair price the job of drilling two wells.

This was too good a chance to miss, Hayden thought, and, based on such expert advice, it seemed a gamble worth taking. He immediately wrote his New York office requesting a special appropriation to finance the drilling of two experimental wells, one in each of two different villages. A large sum of money was involved (about

$4,000), and headquarters, always pressed for funds, came back with a compromise offer. They agreed to provide funds for one well.

With this change in plan Hayden went ahead and selected the village of Gala Nou as the site of the experiment. The necessary machinery was transported to the village, and work began. When the drilling had proceeded a short distance down, some water was found; but an examination of the soil at that level led Richards to question how adequate the supply would turn out to be. The boring therefore was continued. At 189 feet they struck a flow running 20,000 gallons per hour. This was indeed success beyond all expectation. So valuable a commodity is water in this area and so impressed were the farmers that the Village Properties Committee immediately offered to purchase the well by paying all costs. Everyone was delighted by this unexpected turn of events, for now there would be money at hand to attempt the second test well.

But rural improvements never seem to come so easily as this. True enough, a plentiful supply of water was now available at the bottom of the Gala Nou well, but it still had to be raised and sent over the fields to be of real value. Hayden was unwilling to accept payment for this project until he could actually deliver the precious liquid, and for this a good pump was required.

New pumps were hard to find in those postwar days in Iran, but a used one was finally discovered at the Ministry of Agriculture. However, this was only half the battle, for when it was installed, the pump refused to work. During the first few minutes of operation water would issue from the big outlet in tremendous volume. The main ditch running out from the well would start to fill up, and the peasants surrounding the place would scatter to their fields to receive the water—then it would stop. Every part of the machine was carefully checked, and another attempt made. The results were always the same. The engine functioned well and appeared to be developing adequate power. The twenty-foot inner sleeve which went down inside the casing was laboriously pulled out and the valve at the bottom examined. This was in perfect condition; nor could any crack be found in the pipe. When all the parts were

replaced and connected again, there was still no improvement. The pump itself was dismantled, but no flaw could be detected in it. Finally, Mr. Richards was called in to help solve the problem, and he suggested a number of things which might be causing the trouble. Each one of these was carefully investigated without avail. Thus day after day went by with no solution in sight.

My visit to the demonstration happened to coincide with this experiment, and it was during one of their numerous efforts to solve this problem that I watched Hayden and Saeedy, both covered with mud, hard at work to complete a project that had started out so auspiciously. I felt the tenseness of the situation. The gamble had to be won, for the reputation of the entire demonstration was at stake. As time went on and water still failed to come out of that pipe, the villagers lost interest. The men who had gathered, fascinated, around the top of the well were now drifting away, and it was not difficult to guess what they were saying and thinking.

In the States the solution to the problem would have been simple enough. But in Iran, where machine parts are not so easily come by, it was a different matter. Eventually a microscopic crack in the pump casing was found. Hayden and Saeedy had long surmised that there must be a flaw of this kind, but repeated examinations had revealed nothing. Even when finally detected, it showed on only one side, but under the force and vibration the crack had opened up and pressure was lost. At the time of this fortunate discovery Hayden had another piece of good luck. He found in a little shop on a side street of Tehran another pump. The new machine was installed, water was soon flowing, and the reputation of the demonstration was saved.

Water, however, is not always an unmixed blessing; the scarcer it is the more this is apt to be true. In Iran, as in other Eastern countries, it is the chief source of widespread disease. Hayden had not been long in the area before he discovered that malaria and also typhoid, dysentery, and a host of other intestinal ailments were rampant and that they had their origin in contaminated water. Many rural centers have large underground cisterns called "umbars." These are filled up periodically or at certain seasons from an irrigation ditch

running nearby. In one of the villages of the demonstration area the water in the umbar became so dirty and smelly that it was too unsavory even for the villagers, who preferred the open ditch in the fields as their source of supply.

After considering the problem for some time Hayden decided that he could remedy this situation in a fairly simple matter. With the peasants contributing the labor, he proceeded to clean out one of these umbars, make the necessary repairs, and close or screen all the openings. Then, helped by his practical knowledge of agricultural engineering, he constructed a simple but effective sand filter, for which there was plenty of material at hand. At the point where the water was diverted from the fields through the village enclosure he placed a screen. From here the trench was tightly covered as it ran several yards to the filter, which emptied directly into the umbar. When the work was completed and the cistern had been filled, the water was examined by several doctors and was pronounced entirely safe for human consumption, even though it might not have been 100 per cent pure.

After the success of this demonstration became known, calls for the construction of filters came from the neighboring villages. All such requests were willingly granted whenever the villagers could supply the necessary labor and most of the materials. However, this experiment too ran into serious trouble. It was not long before Hayden discovered that several of his filters, which had been constructed with such care, were ripped out, and dirty water was passing once more directly into the cistern. The explanation was frankly given by the guilty parties: water was available in the irrigation ditches for only an hour or so every two weeks and the village supply must be quickly replenished. They claimed that the filter interfered with this job.

Hayden began to wonder if there might not be something basically wrong with his nicely conceived plan. He repaired one filter and then watched closely to determine what happened. He soon observed that the real cause of the trouble was the lack of any system in filling the umbar. The inhabitants of the place would draw water from the storage tank until it was empty. Then they made

feverish haste to refill the cistern the next time irrigation was on. It was true that diverting the water through the filter slowed down the whole process. The remedy was a systematic plan of regularly tapping the water supply whenever it was turned on in the fields. Fairly close supervision and a little education were required until the people became accustomed to planning ahead. Gradually this was achieved, the filters functioned well, and the incidence of disease was considerably reduced.

Malaria was the most common ailment which could be traced to impure water. In Iran, as in many other parts of the world, the disease is the cause of much sickness and consequent loss of productivity. It helps to reduce still further the standard of living of people who are often already seriously handicapped in many other ways. No community can prosper while malaria goes unchecked.

The Veramin demonstration had not been long in operation when representatives of the United States Naval Research Unit of Cairo came to Iran on a mission. Hayden consulted these experts about the malaria problem, and they showed immediate interest. With their assistance and with the cooperation of the Iranian Ministry of Health, a survey was conducted which showed that of 425 persons examined 82 per cent had malaria parasites in their blood. Here was scientific confirmation of an all too obvious fact.

Drawing on his own practical experience and without waiting for a specialist in the field, Hayden employed three full-time workers to clean ditches, spray standing pools, and generally correct unsanitary conditions which contributed to the spread of malaria. By the beginning of the next mosquito-breeding season every house, outbuilding, and stable in the five villages of the demonstration area had been sprayed with DDT. The results were impressive—so impressive, in fact, that in August, 1947, a department of sanitation was added to the expanding program of the demonstration, with Theodore H. Noe of North Carolina in charge.

One other matter still gave Hayden and his assistants cause for serious thought. Of the five villages in the demonstration only one had a school. Such a ratio was fairly typical of the region, in fact of all rural Iran. Certain sections were much worse off; others, con-

siderably better. But this was the general picture. Palishth, which is located about three-quarters of a mile from Mamazan, was the one place within the demonstration area which could boast of a school. It was a fairly large one for a small country town. There were three teachers, six grades, and about ninety children. A few of the pupils walked in from neighboring villages. With rare exceptions the adult population of the Veramin district was totally illiterate, and unless something was done this would hold equally true for the next generation.

Hayden decided that it was time to tackle the problem. He started by selecting two of his village centers for the experiment, and a room in each place was provided. He then equipped the rooms with crude desks and a few other articles of furniture and contributed such necessary supplies as pencils and paper out of his limited budget. The Ministry of Education agreed to provide the teachers. It took time to get started, and the two little schools had operated only eight or nine weeks before the early spring work began to interfere with the classes. At any rate the experiment had proved successful. Attendance had been good and the children eager. Valuable experience had been gained, and the road was clear for further attempts in this field.

While exploring the need and possibilities of schooling for the children, a test was made to find out how illiterate adults would respond to instruction. Under close supervision and encouraged by additional remuneration, one of the two teachers organized and conducted a series of evening classes for the men of the villages. During the course of fifty-four lessons twenty adults attended regularly, and twelve of these could read and write fairly well by the end of the period. Here was an indication of how much more might be accomplished, given careful planning and suitable instruction. In fact, this phase of the demonstration eventually assumed large proportions.

Prompted by these successful experiments in education, the Iranian Ministry of Education now urged that the Foundation take on the task of organizing and directing elementary schools in the larger

district surrounding its five experimental centers. Thirty-five villages comprised the larger area. However, before the proposal could be properly considered, a number of outstanding problems had first to be settled.

Hayden had now spent nearly two years in Iran, and he felt that the time had come to pause and to assess what had been achieved thus far and what, on the basis of these achievements, should be his course of action in the future. About eighteen months and two crop seasons had passed since he started his activities at Mamazan. The elapsed time was not sufficient for any great progress along the stony road of rural improvement, but it was long enough to enable him to take stock of his position and to decide how to proceed from this point on.

A modest start had been made in the field of farming. Valuable experience had been gained and some confidence had been won. These initial efforts had led almost imperceptibly to a gradual expansion of the program in the direction of water supply, sanitation, prevention of malaria, and finally education. But all these worthwhile projects had been in the nature of individual explorations. The moment had now come when these various endeavors should be coordinated and become part of a unified scheme. It was necessary to develop an over-all pattern into which each part of the entire program for rural improvement would fit. Before proceeding further in any one direction, Hayden wanted to get these issues clear in his own mind and arrive at a definite plan of action.

It was apparent that rural Iran needed to improve many of its farming practices, to reduce the incidence of disease, and to raise the level of home life. The only way of achieving these objectives was by practical instruction carried directly to the people on their primitive farms and in their simple houses and isolated communities. In a country like Iran, where illiteracy is widespread and the next generation seemed condemned to the same handicap, a service of this kind would have to include elementary education for the young and special classes in reading and writing for illiterate adults. Since there was little opposition to a progressive move in education,

the time and place seemed opportune to develop schools capable of serving the whole community—with teachers trained to cope with local needs and problems.

Having analyzed the situation and determined on a course of action, it was now possible for Hayden to give favorable consideration to the proposition put forward by the Ministry of Education. Actually, five peasant villages represented too small an area to provide sufficient scope for a demonstration of however modest proportions. The field of operation was therefore enlarged to include the district suggested by the Ministry, not merely for the provision of village schools but for the entire reconstruction program.

With the course to be followed clearly defined, work went ahead rapidly. Further expansion of activities already under way, as well as new additions to the program, were fitted into the over-all pattern to insure a unified method of approach.

The staff was increased as necessity arose and as suitable persons could be found. Most of these leaders were concentrated at the Mamazan base and were not scattered over the area as itinerant extension leaders. From their headquarters they were expected to make contact with farms, homes, and individuals throughout the district, but much of their effort was to be channeled through the rural schools that were now being organized. It was felt that such a procedure would contribute to the development of rural-minded teachers and would result in schools adapted to their environment. At the same time it would insure that gradual improvement in other fields such as agriculture, sanitation, and home welfare would go on apace.

The demonstration thus moved at this turning point from activities that had been predominantly exploratory to a long-range program of rural improvement. Experiments would still be required before new features could safely be incorporated, and methods in use must constantly be improved, but the main steps for attaining the final goal were now fairly clear. A coordinated plan of action based on a definite pattern could henceforth be followed.

Ali Saeedy was placed in charge of the Mamazan center with particular responsibility for water and mechanical problems. Another

young man, Ali Noori, completed his apprenticeship in general sanitation and malaria prevention with such a fine record that he was chosen as the Iranian supervisor for this section of the program. The sanitation department was expanding rapidly under the direction of Theodore Noe, who was successful in securing local cooperation for every project he undertook.

Noe was ideally suited for this position. The son of a rural pastor, he had majored in education, had had four years of sanitation work with the Army of the Pacific, and had finally taken a master's degree in public health—a rare combination of qualifications for an enterprise like the Iranian project. In the years ahead Noe was to draw heavily on these resources of training, experience, and education. When, towards the end of 1948, Dr. Hayden accepted a position with the Economic Cooperation Administration in Europe, Theodore Noe succeeded him as director of the Iranian demonstration.

The problem of finding sufficient teachers for the expanding educational program raised an important issue. The Ministry of Education had agreed to provide the teachers for the schools which the Foundation had undertaken to organize. However, great difficulties were encountered in meeting this commitment. In the few teacher-training institutions of the country the Ministry had endeavored to maintain relatively high standards. As a result, comparatively few young people with the required amount of education were available, and among those who were considered qualified it was rare to find anyone who would consent to go out into the isolated country districts. The Foundation was of the opinion that the preparation of teachers must bear some relation to the need and that it was not always necessary for teachers in rural schools to have attained a high academic grade. Standards can be raised gradually as more instructors become available and more schools are established. This is the normal and logical evolution when a country begins to take positive steps to provide educational facilities for its youth.

Although the Minister himself agreed to this logic, his assistants were inclined to be more concerned about protecting their "standards" than about the need of the illiterate villagers. In order to alleviate the shortage of teachers, the Foundation sought permission

to engage as schoolmasters ambitious village boys who knew how to read and write and do numbers and who were thoroughly at home in a rural environment. With close supervision and intensive, on-the-job training, these young people would eventually make good teachers. After some delay, official permission from the Ministry to follow such a procedure was finally secured.

These young untrained teachers gathered weekly at Mamazan for special training. During these conferences they were given basic instruction in the subject matter they were expected to pass on to their pupils as well as instruction in teaching methods. The agenda of one of those teacher-training classes shows that on a particular day there was a demonstration in teaching arithmetic, a period devoted to the study of health and sanitation problems, and a lesson in agriculture.

At the beginning of the winter season seven new schools had been organized; within three months there were twelve more, with fifteen teachers and an enrollment of 476 pupils. Each of these schools had an adult class with a total regular attendance of over 350. At the end of eight weeks 100 of the men had completed the first book of the course, and each one of these "pupils" had to teach another illiterate before he himself was promoted to the second series of lessons. With this Laubach method of teaching adult illiterates excellent results were obtained.

The educational program was thus firmly set on the road to success. Amir Birjandi, with the assistance of the agricultural and sanitation staff, was busy establishing the new schools, organizing the weekly training institutes, and aiding the teachers with supervisory visits.

The other departments also went steadily ahead. Agricultural workers conducted day and evening classes to spread the knowledge of better farming practices. A simple and highly successful treatment to combat the sheep tick, which had caused serious damage to the flocks of the region, was developed, and farmers came from distant villages to purchase the powder. One complete set of modern farm machinery was imported to assist the peasants who were short of animal power and to test the proper use of modern equipment in the interest of landowners with large estates.

The sanitation department produced an improved filter, explored the possibilities of further increases in the water supply, and prepared for a more intensive campaign against malaria and intestinal disease. Preliminary to this, the Ministry of Health loaned the Foundation a doctor, who assisted in making valuable surveys in all the villages while inoculating the inhabitants against diphtheria, vaccinating them for smallpox, and treating the more serious cases of malaria.

Such is the history of the Iranian project—a project which started with a modest initial program of agricultural improvements and which gradually grew into a structure that is already of sizable proportions and is still growing. In later months, the project, not yet five years old, made rapid and extensive progress. The center at Mamazan is now a busy and beautiful spot. Scrubby trees and unproductive vines were removed or carefully pruned. Numerous well-tilled plots are given over to fertilizer tests and experimental crops, and new or improved varieties of seeds and plants are being widely distributed throughout the countryside. Surplus vegetables are sold at a good price to customers in Tehran. In addition to the living quarters of the Iranian supervisory staff, there are a number of new buildings which include a blacksmith shop, a shed for carpentry, and a place for grinding feed.

A new productive well supplies the needs of the garden and provides pure drinking water for the one hundred people of the village across the road. The same source is also being used to increase the irrigated area of outlying fields. This second irrigation project was financed entirely from local funds—money received for the Gala Nou well, proceeds from the sale of seeds and vegetables, and payments by the villagers for the DDT-ing of their homes and stables.

Improved tillage practices of a simple, inexpensive kind have tripled the yield of grain and greatly increased the production of certain other crops. The farmers of Mamazan are making full use of these new methods, which have been demonstrated on their own fields. Moreover, the same improvements are being adopted throughout the entire area owing to the efforts of the agricultural leaders of the center and the teachers in the surrounding schools. An effective pest killer has recently been developed against an insect which

previously had often completely ruined the melon crop, and during the past season the farmers of twenty villages where melons are an important produce used the new spray with excellent results.

Twenty schools with an enrollment of over eight hundred pupils have been established. One or another of these is within reach of all thirty-five villages. Not every youngster of school age is enrolled, particularly not all who have to be sent to a school in a neighboring village, and a few more communities will ultimately have to be provided with classrooms and teachers. The desire among adults to learn to read and write is such that special classes have had to be organized in a number of places where there is as yet no day school. The thirty-one study groups for adults have an enrollment of over seven hundred men, and at the end of the last series of lessons 75 per cent of the students passed the Government examination entitling them to a fourth-grade certificate. In the village of Mamazan every male adult can now read and write. In order to provide reading material suitable for the adult mind, numerous pamphlets have been prepared on subjects of interest and importance to farmers. Dealing with agriculture, sanitation, malaria control, and topics of a similar nature, these pamphlets are being widely distributed and eagerly read.

The weekly institute for schoolmasters continues to function every Thursday—the day which in Moslem countries corresponds to our Saturday. The number of attending teachers has increased to the point where it became necessary to divide the class into two sections, one group meeting at Mamazan while the other assembles at another village.

Once it was proved how quickly and successfully village boys could be turned into teachers, the Ministry of Education began to urge Director Noe to supply a few of these student teachers for other parts of the country. In response to this request a special, one-year teacher-training course was organized in the village of Palishth. Two groups, each consisting of twenty-two village boys with five or six years of elementary education, have completed the course and are now serving as village schoolmasters all over the country. A third group is in process of being trained. All trainees, whether in the

Thursday classes or in the one-year course, receive instruction in agriculture, gardening, sanitation, carpentry, and blacksmithing. Increasing emphasis is laid on these subjects in the village school curriculum, and each school now boasts of a garden.

Training in all types of rural leadership has been greatly intensified, and several good agriculturalists, trained at Mamazan, are now working in distant parts of the country. Fifty sanitarians completed their apprenticeship during the past season.

As a result of better cooperation between landlords and their tenants in providing labor and in sharing the cost of the DDT program, the campaign against malaria mosquitoes and other disease-bearing insects has been extended to all thirty-five villages. In the smaller area, covered by the previous antimalaria experiment, the incidence of the disease has been reduced from 82 to 7 per cent. Typhoid and dysentery and other intestinal ailments are also on the decrease. More filters of an improved variety are now in use and can be constructed at a cost of about $50 in local materials, with the villagers providing the labor. Every home in Mamazan has constructed a latrine. Other outlying communities which do not enjoy such close proximity to the main center are somewhat slower in adding these sanitation improvements to their homes, but progress continues.

With the confidence, and even the affection, of these conservative Moslem farmers won through practical services which they were quick to comprehend and appreciate, it was natural and easy to turn to the more delicate problems of home and family life. A department which deals with such matters was added to the demonstration at the appropriate time and is now an important feature of the program.

The Iranian demonstration is still only in its infancy. Conditions that have been endured for a thousand years or more cannot be changed in half a decade. But a comprehensive, well-coordinated program such as this stands every change of continuing success in the years to come.

[CHAPTER II]

Deal Promptly with Question of Health

[GREECE]

NEXT to agricultural improvements, the problem of health must receive early attention in the step-by-step development of a complete program of rural reconstruction. The health of people who live in primitive, unhygienic surroundings can be permanently improved solely by methods which tackle the cause of the spread of disease among them—unsanitary living conditions. Health improvement is thus inextricably linked with sanitation, and it is this aspect of the problem with which the rural worker is primarily concerned.

Throughout the Near and Middle East preventable disease results in widespread suffering and premature death. It saps the energy and reduces the productivity of millions of otherwise hard-working people. The debilitating effects of such prevalent ailments as malaria, the various forms of typhoid, and intestinal afflictions can be seen everywhere in countless human beings who appear disinterested and listless, without ambition or vitality. We often hear individuals, or even whole nations, accused of laziness and indifference only to discover that these traits are the manifestations of sickness rather than of temperament. These same people, when physically fit, exhibit unusual energy, take a keen interest in life, and respond eagerly to educational assistance.

As has just been stated, it is through improved sanitation that rural reconstruction can best tackle the problem of health. The never-ending task of curing the sick can be undertaken only by those who are able to provide a corps of highly skilled doctors and nurses

as well as adequately equipped hospitals and clinics. On the other hand, the majority of organizations that are active in the field of rural reconstruction in distant parts of the world have to operate on limited budgets which do not allow them to indulge in costly medical effort. From the long-range point of view, however, limitation in funds may, in this instance, be an advantage rather than a disadvantage, for it forces the rural worker to try to prevent sickness rather than cure it.

Elementary sanitation, combined with education in health and hygiene, holds the key to the problem of disease in underdeveloped areas. In this way alone can lasting results be achieved. Moreover, a practical program of improvements in sanitation can be carried out, under good leadership, by the people themselves and is, therefore, of great educational value. In fact, of all the various phases of rural reconstruction with which this book deals, practical sanitation offers the best opportunity for carrying into effect the policy of helping people to help themselves.

In the previous chapter we have seen that at Mamazan a department dealing with health and sanitation was added to the initial program at an early stage. I propose now to examine the question more closely, and I have enlisted the assistance of one who has long been active and highly successful in this field—Apostolos Koskinides, C.P.H., M.S., Near East Foundation supervisor of sanitation in Greece. The material which follows comes from his pen and falls into two parts. The first is an article on sanitation programs in Greece which appeared in the October, 1948, issue of *The Reader's Digest*; the second is a paper presented by Mr. Koskinides at the University of North Carolina during his year of study in the School of Public Health in 1946–1947. These two selections combine to illustrate, on the one hand, how much can be accomplished with little and, on the other, the basic principles underlying all work of this kind.

HOW THE GREEKS ARE SAVING GREECE

By Apostolos Koskinides, from *Plain Talk*, as condensed in *The Reader's Digest*, Pleasantville, New York, October, 1948 *

There are places in the world where you can't buy much for $80 but in Greece it will buy a great many lives.

Consider the village of Rizo. As supervisor of sanitation it is my job to spend my time in villages like Rizo and teach the people how to keep alive; how to fight malaria and intestinal parasites which in plague years have put as many as 2,000,000 people in sickbeds out of a population of only 7,500,000.

Malaria came to Rizo every year; the people accepted it as an affliction of nature, something about which they could do nothing. Many children died young; the men were always too tired to work hard in the fields, the women too exhausted for healthy childbearing. Not one of the 1500 people left in Rizo when I arrived was in vigorous health.

The villages of Greece do not have a central water system. Usually there is a well—in Rizo it is a spring—somewhere outside the village, and women carry water to their houses. The Rizo spring overflowed constantly and it had become a breeding place for mosquitoes.

I told the people of the village that the malaria which had been killing them came right out of their spring, and that if they would help me I could make the spring clean. They didn't really believe me, but they agreed to help and after many weeks of work the swamp area around the spring was drained. Then we cleaned the spring itself, cemented the walls, chlorinated the water, built a cover for it, and installed a brass spigot. When we finished I tested the water and found it pure.

I returned to Rizo three years later. It was a different village. Then men were working hard in the fields. The priest was happy too. "Before you cleaned our spring this was a village almost without children," he said. "Now you can hear them laughing all day long."

It had cost $80 to renovate the spring. The American Near East

* Reprinted with permission. Two changes in minor detail have been made, as well as omissions of irrelevant material.

Foundation, for which I have worked many years, gave the money. Yes, you can do a lot with $80 in Greece.

I have done the same thing in a hundred villages. People who say that Greece cannot survive are wrong. True, our people are in a precarious plight. The villages are breeding places for intestinal diseases. Methods of sewage disposal are primitive or nonexistent; 98 per cent of the farmers do not have latrines. Typhoid, dysentery, paratyphoid and other diseases are rampant.

Our land is old and tired. The dread Dacus fly ravages our olive crop. We have virtually no industry and little to export. During the occupation the Germans wrecked or took away what little machinery we had, burned villages, cut down our forests for fuel. And Greece is still at war. Yes, the picture is discouraging, but I have faith in the ability of my countrymen to survive.

Greece cannot be saved by charity. To fill our stomachs with gifts of food merely postpones the inevitable. Greece can be saved only by Greeks. I am one of many trying to teach the people to save themselves.

The curse of Greece today is the unsanitary condition prevailing in its villages. If overnight I could magically clean up disease-breeding wells and install sanitary latrines, Greece would be on its way to economic recovery. The people would be healthy, and a healthy farmer is a good farmer. A good farmer could surmount the difficulties that the tired, scanty soil presents, and the cities would receive a steady flow of food. The farmer would spend his profits for household commodities made in the cities. Industry would expand and more people would be hired, and these people in turn would be able to buy more food.

The Near East Foundation spends thousands of dollars a year in Greece. Not one cent of that is given as charity or paid for labor. Once I convince the people of a village that it is possible to pipe water from a well three miles away into public fountains in the village, they gladly contribute the necessary labor.

I did that recently in Mandra, a town of 5000 only 20 miles from Athens. For more than 100 years the women there had made a three-mile trip each morning for water.

It took me a long time to persuade the people to bring the water to the village by pipe, but finally they agreed to the scheme. They could borrow the money to pay for the pipe from the Agrarian Bank in Athens and if each family would pay a water tax of about $12 yearly the sum would be paid off quickly. I told them I could get a gasoline pump from the American Mission.

The people contributed 10,000 man-hours of work. Today they have water for cooking and cleanliness, and the disease rate has been cut in half. Now I am persuading them to help me build latrines.

I am not a doctor but ever since 1914 I have devoted my time to trying to persuade people to save their own lives. I was a student in Turkey then, at the American College in Konia. When war came the Turkish Army grabbed me and, because I had once worked in a drugstore, the government appointed me sanitary inspector and sent me into the interior where smallpox, cholera and typhus were raging. There was no hospital or doctor, not even a pharmacy, in the district.

I quarantined the 80 villages in the area and isolated houses in each community, where I moved the sick. I made the people who were still able-bodied clean up the garbage and filth and bury it. I had no medicine; my only weapon was cleanliness. But after we cleaned up the villages and whitewashed the houses, the epidemics passed quickly.

The government, fearing another outbreak, ordered me to stay on, in the village of Kadin-Han. I was now able to get drugs, and ran a sort of dispensary. At night I held a third job. Few of the villagers could read, and when their sons in the army wrote to them I had to read the letters and answer them. I learned to realize that even the most ignorant, lice-laden peasant was worth saving. Most important, I learned that you can't save people: you can only stimulate them to make the effort to save themselves.

When World War I was over I went to work for Near East Relief. . . .

Once the work of Near East Relief was finished, it was reorganized

as Near East Foundation. Our primary aim is to improve agriculture, home economy and home hygiene through education. . . .

Now I can see the day coming when malaria and intestinal disease will be a thing of the past in Greece. In 1946–1947 I spent a year at the University of North Carolina studying sanitation methods. It was an exciting experience. For the first time I had at my finger tips the knowledge attained by the great experts in my field. . . .

The greatest thing I learned was the American philosophy of public health, that an ounce of prevention is worth a pound of cure. Now I preach the sermon of preventive medicine. . . . The health projects of the National School of Hygiene and of Colonel Daniel E. Wright, who is training the National Air Force to fight malaria with DDT, have brought cases of malaria down from 2,000,000 to 50,000 a year. But we haven't as yet had time to educate the people to prevent intestinal disease.

Those who say that Greece cannot survive said once that it would be impossible to build the Panama Canal because of yellow fever, and that it was death to send troops to the disease-ridden Philippines. Yet American genius conquered nature in Panama and the Philippines. And with the help of the knowledge that has come out of American laboratories we Greeks shall inspire our countrymen to save themselves.

ORGANIZING ENVIRONMENTAL SANITATION PROGRAMS IN RURAL AREAS OF GREECE*

Dr. C. E. Turner, Professor of Biology and Public Health at the Massachusetts Institute of Technology, has said: "Doing things for people is often easy, but it is expensive and of temporary benefit. Showing people how to do things for themselves may take a little time, but it is relatively inexpensive and its results are lasting. More-

* A paper presented by Apostolos Koskinides to the School of Public Health, University of North Carolina, Chapel Hill, 1947. (A few paragraphs not related to the present discussion are omitted.)

over, the people are strengthened by the latter process and weakened by the former. Man's natural desire to relieve suffering and the clinical approach to public health problems have commonly resulted in the expansion of treatment programs which might be extended to consume the whole national budget without achieving their objective. The great hope for public health within budgetary limitations lies in securing more healthful living on the part of the people." *

No government can bear the burden of public health work for the whole rural population. This must be accomplished in the sphere of self-exertion by the citizens themselves.

The cooperation of the people and the community in organizing an environmental sanitation program in Greece is the basic and only factor for the success of such work. And in order to secure such cooperation the people must be taught, largely through demonstrations. These activities must be practicable, applicable, and understandable.

The method of approaching simple folk is important, and especially vital is the spirit in which this is done. Few persons like to be lectured bluntly about their incorrect habits. They should be led, not driven. They should be stimulated and induced to express a desire to live more hygienically. The sanitarian and public health worker can awaken and instill among their beneficiaries an understanding of the fundamental rules of hygiene and a realization of the importance and necessity of healthful habits of life. By this means many diseases and unsanitary conditions can be brought under control and in time eliminated.

The aim of the work of the sanitarian is to awaken in people a permanent interest in hygiene and sanitation—to provide necessary leadership and through this leadership develop local interest for the program, induce local cooperation, secure local funds, labor, and materials and with these resources carry on a program of community improvement in sanitation and hygiene.

* This quotation is from a letter dated January 14, 1936, written by Dr. Turner to Dr. J. L. Hydrick. It appears in Dr. Hydrick's book *Intensive Rural Hygiene Work . . . of Netherlands India* (1937), p. 6. Reprinted with permission.

Progress will occur rapidly and successfully without using coercion when the people are brought to realize that it is for their own benefit to change their unsanitary habits for more healthful living. Of course, in every group of human beings there are a few individuals who cannot be convinced that they should adopt anything new. Happily, they are rare in our rural villages. The great majority of peasants are eager to learn new methods and adopt them. During my sixteen years of work in Macedonian villages I seldom met the immovable kind, and even these joined eventually with the opinion of the majority.

An attempt to carry out sanitary and hygienic measures with the use of force gives rise to active or passive resistance which always accompanies the enforcement of any law which is not supported by public opinion. Therefore, all constructive effort to bring people to a more hygienic and sanitary manner of living should be made, primarily, not by means of laws but by educational measures. Although patience and devotion are required of those who follow this procedure, the results obtained will be permanent and will, therefore, repay the conscientious worker.

In 1937, the Greek Government asked the American Near East Foundation to take over the Government Sanitarians of the Health Department of various counties and give to them postgraduate training. The program planned was for a period of six months. When the men reported to me, there was much discussion concerning the use of force. Many thought that better results could be obtained in a shorter time and more projects could be accomplished by the use of rules and regulations. In order to give all methods a trial and to satisfy those who supported such claims, a program was organized in one village where this was the policy. A capable and enthusiastic sanitarian with these ideas was placed in this center, but the accomplishments of his six months of effort were very limited; while in other stations where only educational methods were used, the results obtained were excellent and the number of successful projects was greater than we expected.

In order to achieve results in rural areas one must use methods which enlist the active interest and cooperation of the people and

then teach them measures which they themselves can carry out to protect their own health.

There would be no objection whatever to the use of coercion in rural areas if its use could insure permanent benefits. But it has been tried in many places without success, and it is so much more difficult to secure the cooperation of the peasants after a failure from this method that it is not advisable to begin with the use of force. Work should be initiated with educational measures, and coercion should be added only after this approach has built up a public opinion which is strong enough (say 90%) to give support to the use of such methods. A program based on coercion requires a large personnel to enforce all the rules and regulations, and this makes it far too expensive. If it were possible to secure results at a reasonable cost by this means, then the sanitary conditions in all countries would be much better than they actually are today.

There are many who believe that curative measures should not be separated from preventive medicine and hygiene. This belief is based on the idea that "a treated patient is a center of propaganda." Even if it be granted that a treated patient could become a center of propaganda, he would only be a passive medium. A cured patient becomes a strong advocate for that special treatment which he has had for that particular disease from which he was suffering and not a propagandist for hygienic practices and proper sanitation in general. Health programs cannot depend on such negative assistance if permanent results are to be secured. These statements are not intended to imply that hospitals and curative measures are not critically needed in many parts of the world.

If one tries to make a list of the hygienic habits which have been developed through treatment, the results are disappointing. How often are patients treated for a disease, only to become reinfected with the same disease because they have not changed their habits. Teaching sanitation and hygiene by means of medical care is basically a negative method. Medical care proposes to relieve those who are suffering from disease and tells them what they should not do. Hygiene and sanitation works by telling the people what they should do and tries to prevent the spread of disease. The two should co-

operate, but the two aims are different; the methods are different; and differently trained personnel should be used wherever it is possible. On account of lack of personnel and money, it is sometimes not possible to separate the two services, so that upon one person falls the double task of conducting sanitation work and medical care. However, both medical care and sanitation programs would secure better results, each in its own field, if they could be conducted separately.

The people must understand that medical treatment, carried out by the personnel of hospitals and dispensaries, helps them during attacks of disease; but the adoption of sanitary habits and healthful living will help them to avoid disease and improve their physical condition. It is of the greatest importance that individuals learn what they themselves can do in regard to this matter. It is impossible for any government to give medical care to every person of an entire population. The people must be taught to seek good health through hygienic habits and sanitary surroundings. The hospital or the clinic can help them during their periods of illness.

Before planning any program, it is of great importance to make a survey in order to determine the sanitary and hygienic conditions of the community. Such a study will bring to light the special factors which cause much of the sickness. The future program will be based on the facts obtained, and recommendations will be made to the community for its essential needs.

Greek villages, from the standpoint of health and sanitation, are in bad condition, and their needs are numerous and great. A reconnaissance survey which was conducted in 1932 in 54 Macedonian villages gave a picture of the sanitation and health situation as follows:

Population of the 54 villages was 49,785 people or 9,959 families.

Water Supply

Springs —47 villages had 122 springs
12 villages had 26 open springs
35 villages had 35 covered springs

Wells —37 villages had 357 wells, of which only 2 were protected from surface water

General—39 villages had adequate quantity of water
15 villages had inadequate quantity of water

Latrines in Homes

Facilities available to approximately 70% of homes in 31 villages
Facilities available to less than 30% of homes in 23 villages
Unsanitary conditions in 54 villages
Sanitary conditions in 0 villages

School Latrines

Satisfactory sanitary facilities—2 schools
Unsanitary facilities—45 schools
No facilities whatsoever—7 schools

The mortality rates from communicable diseases in rural areas in Greece ranged as follows in 1932:

Death rates per 100,000 population from water-borne diseases	Death rates per 100,000 population from malaria	Death rates per 100,000 population from tuberculosis
87.2	108	162

The chief factors in protecting life against disease in rural villages of Greece are safe water supply, proper and safe disposal of human excreta, malaria and tuberculosis control. These, therefore, are the main health and sanitation problems. Solving these difficulties means the solution of ever-present problems which must be the concern of the sanitarian and public health worker.

BEGIN THE CAMPAIGN on a small scale and then extend the work slowly and only as results justify extension. Use methods and materials adapted to local conditions. Inaugurate programs in rural areas with an attempt to teach and demonstrate to the people a few fundamental but simple hygienic rules of life which they themselves can carry out.

Since a general program of environmental sanitation includes many subjects, it is better to start with one basic problem having to do with preventing the spread of disease. For example, in controlling intestinal diseases, two factors are of vital importance: (a) Safe Water; (b) Proper Disposal of Human Excreta. A good procedure is to start with (b). Begin the construction of sanitary latrines

with five farmers. While the work is going on, arrange for the rest of the inhabitants of the village to come and see this development. Explain to them in simple words the object of building a latrine. Persuade the farmers to use all available local materials found in the environment of the village to keep down the cost. Demonstrate the proper maintenance of this sanitary device. By instilling in the minds of the people an understanding of how intestinal diseases spread, there is created a realization of the danger of soil pollution and an appreciation of the need of rendering human excrement harmless. Soon follows an opportunity to explain that the use of latrines is a step toward the prevention of filth-borne diseases. Still later, steps can be taken to arouse interest in improving the water supply and dealing with other sanitation problems of the community.

Whatever the methods used, they must stimulate in the people an active interest. Passive interest dies out far too quickly. All projects must be carried out cooperatively with the people and must be paid for largely by them. The procedures must be simple and the materials locally found. By such means plus patience and tact the traditional unhygienic ways can be replaced by new and more healthful practices.

Not only should the system be proper but the personnel must be of the right sort if one expects to secure permanent results. Without properly qualified personnel the program will fail no matter how excellent the plan. Successful sanitation endeavor requires the full time and energy of the persons assigned to a program and when properly carried out is exceedingly difficult work. It requires inexhaustible patience and a thorough knowledge of the techniques involved. In order to insure satisfactory results, proper supervision of the field personnel is necessary, and this demands of the supervisor or director thorough knowledge of all aspects of rural sanitation.

As already indicated, the qualifications which the field sanitarian should possess are of great importance, because it is he who carries out the details of the work in the villages. He must be polite and modest, and he must possess the inexhaustible patience we mentioned. He must answer questions sympathetically and intelligently,

and he must use simple language, understandable explanations, and no large or technical words. He must be a person who inspires confidence. If he is too young the people will not have confidence in him; on the other hand, if he is too old he will probably find that the work is too tiring for his physical strength. I think a sanitarian should range between 25 and 35 years of age. He must be strong and healthy. If possible, the man should be from a rural or semi-rural district and be able and willing to live in the area in which he works.

Since the sanitarian in all probability will be a government agent or will receive in time civil service status, he must have the qualifications required by law. Such workers should be graduates of high school (Gymnasium), and they must have a full year's training in a special, well-organized course for the training of sanitarians. The content of this course should deal with the facts of epidemicity of disease, environmental sanitation, malaria control, and some microbiology; there should be participation in the actual organization and operation of various types of projects. The men must be taught mapping, how to estimate the cost of materials, reading and interpreting plans, specific techniques of the various phases of environmental sanitation, for example water supply, excreta disposal, insect control, etc. In general, they must be prepared to deal with all major health and sanitation problems of rural villages and towns as follows:

1. Communicable diseases
2. Principles of excreta disposal
3. Excreta disposal without water carriage
4. Excreta disposal with water carriage
5. General characteristics of water
6. Treatment of water
7. Protection of water
8. Refuse collection and disposal
9. Mosquito characteristics
10. Mosquito control methods
11. Organization of anti-mosquito campaigns
12. Fly control
13. Rodent control
14. Milk sanitation

15. Food sanitation
16. School sanitation
17. Ventilation and light
18. Housing
19. Industrial hygiene (a few basic principles)
20. Tourist camps and swimming pool sanitation
21. Disinfection
22. Vital statistics
23. Organizing village clean-up campaigns

The course should be located near (or still better, in) the area where a program is conducted, and during the period of training the students should take an active part in the work.

I have noticed that rural sanitarians with only theoretical or academic training have been able to accomplish but little. They require supervised practice in the field; they must know the difficult art of adjusting and adapting their science to the village environment. As one means of maintaining such standards of training student grades should depend not merely on the work done in the classroom and laboratory but also on the skill shown in the field.

The educational side of the community program should include public lectures and gatherings held in the evenings and during slack seasons of the year. The villagers can meet together in the school building, the community headquarters, one of the coffeehouses, or even in the public square.

The talks should never be long, should include few technical terms, should be given in the simplest language which can clearly express the idea, and, in the beginning of the program, should concern only one topic. Lectures should be accompanied with an abundance of demonstration material such as charts, models, pictures, etc., in order to hold attention and make more clear the subject presented. Every effort should be made to have the audience take an active part, either by asking questions, examining the charts, or inspecting the models. For example, if the discussion has to do with malaria, an active larvae in water and several live adult mosquitoes provide useful and appropriate materials which help arouse interest and focus attention.

Hygiene and sanitation lessons in the schools are highly important. Such activities should be correlated with the work in the village so that child and parent receive training along similar lines and at the same time. Instruction in hygiene and sanitation must reach the child in his home and community as well as at school, and it must be practical. The lessons at school are provided not for the purpose of filling the child's mind with a few facts *about* hygiene but in order that he may *acquire* hygienic habits.

We have in this thesis a statement of sound philosophy evolved over the years on the basis of experience. This is not mere theorizing within the cloistered walls of a great university. It was written by a man who was describing methods which he himself had successfully used. Moreover, it stresses the importance of the human relationships which play so vital a part in any program of sanitation and health education.

[CHAPTER III]

Improve the Home Practices

[SYRIA]

WE now turn to the home itself, traditionally the woman's domain, and to the more delicate problem of improving the home situation. As an illustration of this kind of effort in action, I have selected a project which has been in operation for some years in the new Republic of Syria or, to be more precise, in a small rural district a few miles from the ancient and now thriving town of Damascus.

An earlier chapter stressed the wisdom of attacking first the economic side of village life. The story of the Syrian project is told at this point in our series of "steps" in order to emphasize the importance of dealing with problems of the home only after other foundation stones in the construction of a comprehensive program of village improvement have been firmly laid. To this day the East remains "a man's world." If, therefore, the confidence and the support of the male population can be won by contributing to their economy and by improving the health of their families, they may look with a less critical eye on efforts designed to help in the more intimate field of their own homes. It is essential also that those who undertake this kind of activity first gain experience and intimate knowledge of the area in which they are to work before they attempt to deal with matters so closely interwoven with the cultural traditions and the religion of the people.

After this exposition of a desirable procedure, it may seem strange to the reader that I should select as an example a project which followed precisely the opposite course. In the Syrian demonstra-

tion, the department of home welfare was organized first. It came about as a result of a set of circumstances into which we need not go. The point to be emphasized here is that by reversing the steps a serious error was committed and a difficult task was made infinitely harder.

Babbila, about ten miles east of Damascus, is a farming community of about six hundred homes, concentrated in the traditional Eastern manner in a small area with scattered fields lying outside the village quarters. Most of the farms are small one- or two-acre plots, individually owned and worked by the family. A few are somewhat larger, cultivated by fairly well-to-do owners. The agriculture of this district is highly diversified; it includes a wide variety of tropical and temperate zone fruits and vegetables, with only limited space devoted to grain. Most of the land is irrigated, either from dug wells or by water diverted from the Baroda River, one of whose seven tributaries runs through Babbila.

The people are, for the most part, poor, hard-working fellaheen. During and immediately after the war they managed fairly well with good prices for their products, but today the life is becoming harder again.

The one- and sometimes two-story houses are built of mud brick. The homes vary greatly in size, but consist usually of one, two, or three rooms, located inside a high wall. Within the enclosure there is usually a stable for the animals, although occasionally this may be constructed just at the entrance but outside the farmyard. Only a few of the more progressive households enjoy the convenience of a latrine.

The streets of the village are narrow and winding, with thick swirling dust in the summer and slippery mud in the season of rains. The men are much in evidence and receive foreign visitors, such as myself, in the home; the women remain in the background. The village, like most other rural centers in Syria, has a grade school for boys while the girls have as yet no school. This, in brief outline, is Babbila, where the Near East Foundation's demonstration home is situated.

When I visited the center in June, 1949, I was pleasantly sur-

prised by what I found. There was a typical peasant home with an open court or patio surrounded by the usual wall. On the left was a one-story two-room structure. One of these rooms was used as the living quarters of the staff; the other made a good classroom where the women and children could meet for instruction. Across the yard was the kitchen, now used chiefly for classes in cooking and nutrition. To this had been added a few months before, an extra room where a nurse-midwife looked after the clinical needs of the center.

Flowers lined the paths and the small buildings. At the far end of the yard was a flourishing vegetable garden interspersed with trees and more flowers. A fairly deep well, equipped with a hand pump, provided pure water for drinking and for irrigating the growing plants. The two members of the staff who were showing me their domain with some of their students were exceedingly proud of their home.

I could appreciate their feeling of pride in their achievement because I had seen the place two years earlier in its original state. At that time the program director and his supervisor of home welfare were considering the possibility of renting the group of buildings for demonstration purposes. The place had been intended for the son of a local farmer who was planning to marry and wanted quarters of his own. However, the young man died before the buildings were completed and they were not being used. The room which was meant to serve as a kitchen was already in bad disrepair; the yard was a mass of stone and rubble, and the soil was baked hard following the first rain of the season. It was difficult to imagine that one day a fine garden would blossom in this spot.

As I was being conducted around by my guides, I began to look deeper into the center's activities. We visited the classroom, where we found twenty or twenty-five girls and young women, several of whom were making dresses from patterns while a few were studying an Arabic reader. On certain other days of the week they devoted all their time to reading and writing and arithmetic. I was also shown some of the beautiful embroidery these women learn to do so well with their deft fingers and their eye for color.

The busy farming season was now in full swing. This reduced

attendance at the center and greatly increased the proportion of ten or twelve year olds to the young women and mothers. A few weeks before my visit the numbers had averaged at least forty or fifty young women and girls for the classes in sewing, cooking, reading, and writing. They trudged in from four different villages of the district, a few walking as far as three kilometers each way.

After taking several pictures of the girls in the garden they had helped to create, I inspected their kitchen. It was a little room, perhaps twelve or fourteen feet square; its equipment was limited but sufficient for the modest needs of a peasant home, with in addition a few items for purposes of instruction. There was a small stove, which provided hot water in a tank constructed around the stovepipe. The contrivance had been discovered among a few of the more progressive families, and now it was used as a demonstration to others. It provided warm water for bathing as well as for washing dishes and avoided the necessity of using the public bath, which is not always very sanitary.

There was the usual niche in the wall which served as a cupboard. In this case it was neatly covered with a curtain of inexpensive local material. As the curtain was drawn back for my inspection, I discovered a set of dishes nicely arranged on the shelves. In the lower part of the cupboard were several jars of preserved fruits and vegetables which the girls had prepared. There was a screened cupboard in which to keep food protected from flies; of two small tables, one was for eating and one for the work of the kitchen. Besides, there was a large wooden closet for cooking utensils, and I learned that it had been made out of the boards from old boxes commonly found in most of the homes and used to store grain.

This corner of the homestead was certainly an all-purpose unit —kitchen, dining room, bath, and classroom. It attracted much interest among the women who came to the center, and my guides told me that they had on several occasions been called to village homes to help redesign or rearrange rooms in a similar way.

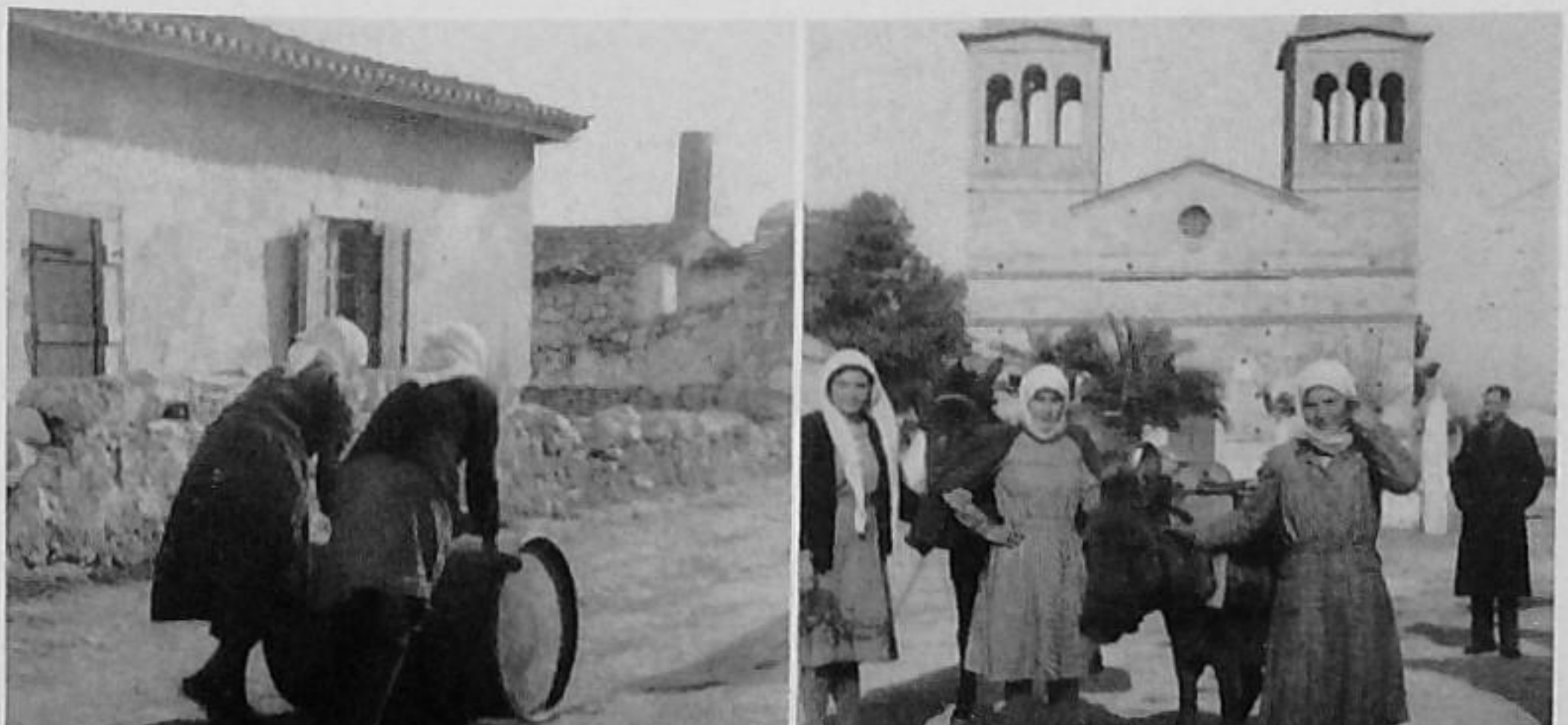
Now we moved on to the clinic. One end had been partitioned off as a waiting room, which had a separate entrance direct from the street. The nurse-midwife was busy in her neat examining room.



A stall at a village bazaar.



One of the many adult classes in reading and writing.



Left. Before water was brought into Magoula, the women of the village rolled drums or carried tins two kilometers to supply their homes. *Right*. Some used donkeys for the daily trip to the spring.



Blessing the new supply of pure water for Magoula.



Apostolos Koskinides flanked by two of his ardent supporters.



The Babbila center's garden.



Miss Sawaf showing off a dress made by one of her pupils.



Girl students at the Babbila center.

She finished with the woman she was treating before I was permitted to enter. After my presence had been duly announced, so that those who wished could draw down their veils, I looked into the waiting room. There were a dozen or so women waiting their turn, some with their babies. The register showed a total of twenty-five visits for that day. As with all other activities in the center, attendance at the clinic for consultation and treatment had dropped considerably since the beginning of harvest. A few weeks before, the register showed a daily attendance of around fifty, with the women coming in from eight different villages.

When we had completed the tour of the center, we sat down in the living room to cups of Turkish coffee and a good talk. As I have already mentioned, the Babbila center was manned by a team of two workers—a young homemaking teacher and an older nurse-midwife. Miss Lydia Najjar was in charge of the domestic side, and the health and midwifery department was conducted by Miss Sanieh Zafari.

Miss Najjar had had several years of teaching experience before coming to Babbila and had specialized in housecraft and homemaking. She was a Christian, and although this might easily have proved to be a serious handicap in a conservative Moslem village, she had so far not met with any difficulty on account of her religion.

Miss Zafari was a much older woman and a Moslem. She had made two pilgrimages to Mecca and Medina and was, therefore, a "hajji," a fact which added greatly to her prestige among the village folk and of which she made good use.

Thus were a Christian and a Moslem successfully working together in their efforts to raise the level of home life in the district.

Both women, but more especially the nurse, were spending much time going out into the homes of the villagers, and they planned to lay increasing emphasis on this side of their program. They told me that they were concentrating more and more on improving home practices: their domestic science teaching and their health talks and clinical treatments were geared to show concrete results within the homes. Much time and careful study were required to insure that

their recommendations were of a practical nature, in keeping with the limited means available to the average household.

The policy of using a nurse-midwife as the second member of the working team was an excellent one. A midwife goes eventually into nearly every home. If she is trained in child care, home sanitation, nursing, and other aspects of public health and personal hygiene, she can easily and quickly move from delivering babies to instructing the mothers and ultimately the children.

During my tour of inspection I had noticed three pretty young women seventeen or eighteen years of age who wore no veils. Upon inquiry I discovered that they were among the few older girls staying on during the harvest season for additional instruction. With their parents' consent they were studying under Miss Zafari to become midwives, and they were also absorbing all they could of the homemaking work. The training and especially the retraining (of which I shall presently have more to say) of local midwives had come to be an important feature of the home betterment program.

Not long after my trip to Babbila, I was taken to see another home center at Nashabeyeh. Situated in the same general region but twice the distance from Damascus, Nashabeyeh is a small settlement of about forty homes surrounded by eighteen or twenty other villages. Farming is less diversified than in Babbila and is confined chiefly to grains. There is little irrigation. The people are poorer.

The model home was quite similar to that of Babbila, and there was the familiar team of two leaders in charge. Miss Amineh Bitar, the nurse-midwife, had had excellent training and a wealth of experience including four years of pioneering work among the primitive people of the Sheikhdom of Kuwait. The home economics end of the program was in the capable hands of Miss Fikrat Sawaf El-Sharkass. Always interested in homemaking and the practical arts, this young woman had studied handicraft for a short period at a school in Damascus, and after the Near East Foundation opened up its first demonstration in the town of Douma not far from Damascus, she had spent all of her leisure time at the center. It was not long before she was helping with the instruction of the other

girls; when the supervisor began looking for workers willing to live in a village and develop a program of home improvement there, Fikrat Sawaf volunteered for the position.

The arrangement of the home at Nashabeyeh was not greatly different from that of the Babbila center. There was the usual enclosed court. At the left was a room used for classes. On the right a small two-story structure provided space on the first floor for a clinic; above was a bed-sitting-room for the two resident workers. On the far side of the patio were two more rooms, one a kitchen and the other a classroom intended for home economics instruction. However, in the hot summer season, when the attendance was small, this classroom served as a rest room and a place to entertain callers. There was little space at this center for a garden, but every available spot along the edge of the buildings had been utilized by the girls to grow flowers, shrubs, and climbing vines. On a high trellis at one end of the yard were grapevines with many big bunches which would eventually ripen into delicious fruit.

At the time of my earlier visit to Syria, two years previously, Nashabeyeh was a promising demonstration, though still in its infancy. In the intervening period a great transformation had taken place.

The courtyard had been paved as it was not suitable for a garden; the walls had been repaired, the windows screened, and the rooms renovated. The local representative of the government had stepped in to see that the materials used were good and the workmanship proper. When he learned that some of the poles to be used in reroofing one section were not up to standard, he sent them back and had others selected. The place was typical of other farmsteads of the district. But it was neat, clean, and orderly, and it was a demonstration of how village homes can be improved at little expense.

Here too, as at Babbila, the attendance of women had dropped during the summer months, but several of the girls in the home-making class, after working in the fields from four in the morning until nine or ten o'clock, continued to come to the center in order not to miss their daily instruction. Moreover, it was during the

Ramadan fast when they could not take food or drink water until sundown.

A few weeks earlier, attendance had averaged thirty girls and young women and over a hundred mothers who came in for instruction and clinical treatment. In the fall the numbers would rise again. Each of the eighteen villages of the district was represented among the women and girls attending the center. Much of the widespread interest was due to the Nashabeyeh midwife who accompanied the Government doctor, two days a week, on his rounds of the area.

The difficult task of training and retraining midwives has already been mentioned in connection with the Babbila center, but this feature of the program, particularly the retraining, deserves a fuller description. At the time when the work started in Syria, it was found that every rural village had at least one local midwife. These practitioners of an age-old profession were far from clean, and the methods they employed were shocking. Cutting instruments included old manicure scissors, rusty jagged knives, and broken razor blades. A typical treatment for puerperal fever was to "take one raw onion, slice and cover with sesame seeds, wrap with unwashed camel's hair, and insert the product into the neck of the womb." Death of the patient was inevitable.

Clearly something had to be done. The obvious solution might have been to substitute midwives who had more suitable training. But such a procedure is not always the best course to follow, and the home welfare director for the area adopted a different procedure. She decided to try to make use of the material at hand. With the aid of the local authorities, the nurse-midwife of the center was encouraged to enroll a few of the village midwives for a course of retraining. They responded surprisingly well and were given instruction in modern midwifery as well as in personal hygiene. They were fitted out with white uniforms and a handy kit, which included all of the essential instruments, bandages, and first-aid materials, assembled in a light case with a handle. This badge of their profession had a psychological as well as a practical value.

Soon the old-fashioned midwives began to take pride in their

newly won skill and were wearing their white dresses on every possible occasion. The nurse-midwife continued to instruct them and later supervised their deliveries. At the time of my visit, Nashabeyeh had nine of these women, from as many different villages, undergoing retraining. In Babbila there were four.

These were the achievements which the home welfare department had to its credit after three years of effort. Even if the ultimate goal—a higher level of home and family life for the whole community—was still some distance away, definite progress had been made since the start of the demonstration in 1946.

Before the original launching of this work, the Syrian regime then in power had requested the Foundation to undertake a demonstration in rural improvement, and their invitation was accepted. There was insistence from several quarters that the work should start at once, and since an American homemaking specialist—a woman—was available, the Foundation was finally prevailed upon to send this specialist out into the field before any of the other basic features of the program had been undertaken.

Not until several months later was a program director with an agricultural background dispatched to Damascus. Farm reared, agriculturally trained, and experienced in extension and rural education, Clarence O. Eyer of Indiana quickly realized that his own specialized interests would have to await later development. From the beginning he found that most of his energy and time was needed to protect the small program for women and children which had been started by the home demonstration leader. This lady, though she had reached the age of retirement, was still in vigorous health and greatly desired to make a contribution to the urgent needs of her sex in less-privileged parts of the world. After her long experience in the States, it seemed unnecessary to her to take precious time to study the new situation or to explore in detail the unfamiliar problem.

The wiser policy would have been to devote several months, perhaps even a year, to a study of local conditions and thus gradually determine the proper procedure to be followed—especially because no other rural services had helped pave the way. Even under the

most favorable conditions it is always better first to conduct activities which are basically exploratory, though they may be given the appearance of a program. At this stage the underlying aim of the leader must be to educate, not the people, but primarily himself. Frequently it becomes a matter of engaging in short-term projects which eventually merge into an organized pattern of work.

In the case of Syria there was a hurried appraisal, and a program was started. The town of Douma—a suburb of Damascus with a population of 30,000—was selected for the initial attempt. It was in certain respects a rural center, a sort of farming outpost of the capital. In a town of such size it would be difficult for the demonstration workers to become part of the community even had they lived there. In the States, the home demonstration leaders move about in their cars to the hamlets, towns, and farm homes. Why should not the same plan be followed in Syria? So, at least, reasoned the homemaking specialist unaccustomed to the East.

Thus the staff was transported back and forth by car; sometimes they would go by the tram line which connects Douma with Damascus. There were courses in home economics for girls and young women. There was health and child care instruction for mothers. There were classes in the primary grades for those who had not had an opportunity to attend public school.

In the beginning, the response was fairly good and the work quite successful, especially in the Arabic classes, in which girls wanted to learn how to read and write and do numbers. But foreign organizations are not supposed to operate schools without special authorization, and no such permit had been issued. The size of the building, the large numbers enrolled, and the tender age of many of the students gave the impression that this was a "school." Most important of all, the organization had not demonstrated its worth to the men of the community by introducing agricultural or health improvements which they could quickly and readily appreciate. For a while the program had to be stopped until the Syrian authorities could investigate. The point at issue was finally settled, and work resumed with only occasional rumblings.

It was decided that a community much smaller in size and more

typically rural might well be selected. There was the village of Jeramana in the same general region where suitable quarters were found and activities started. But here, too, the workers commuted from their Damascus headquarters. Little Jeramana had two "mukhtars" or mayors and was riven by numerous factions. Certain officials in Damascus, some of the local authorities, and not a few of the people of the town were suspicious of this American organization which had so recently come to the place and was already busy with the women and girls. As a result Jeramana proceeded to become a discouraging series of false starts and sudden stops.

Then Nashabeyeh was opened. In Nashabeyeh it should be possible, it seemed, to come much closer to the lives of the farming people, for it was not only a small rural community but much farther from the metropolis. The staff, however, still went back and forth by car after the manner of a home demonstration leader in America. Thus even in Nashabeyeh the workers did not become a part of the community, and the results were not what they might have been in a place so carefully selected.

After a year of such trials and errors the first expert resigned and was succeeded, in the summer of 1947, by Josephine Vogt from the state of Wisconsin. Josephine's slight build and quiet manner belied the energy and patient drive which lay beneath an unruffled surface. With a cheery voice and a pleasant smile was combined a rare sense of humor which seemed to come to the fore whenever the going was hardest. In addition, she possessed a wealth of experience ready to be applied to the problems in Syria. At the same time Josephine was considerably younger than her predecessor and so could more easily afford to proceed slowly.

Before her arrival in Syria she had been active for ten years in rural welfare work in her home state and had studied social service administration at the University of Chicago. After the war she had worked in Greece for two years, first with the United Nations Relief and Rehabilitation Administration and then with the Near East Foundation in its program for Greek peasant homes. With such a background of varied experience, there could hardly be a more suitable person to head the venture in Syria.

When Josephine arrived she found herself in charge of a project handicapped by an unfortunate start, but she discovered one valuable asset. Her American predecessor, quick to spot talent, had discovered and had left behind as her legacy Souad Ajlani, knowing that here would be a permanent contribution to the work of the center.

Souad Ajlani was a woman of rare and exceptional gifts. Although a member of a leading Arab family of Damascus, with valuable contacts in high places, she nevertheless had a ready understanding and a deep sympathy for the common people and the village fellaheen. When she talked with a hard-working countrywoman or a poor refugee, she spoke to them with an understanding heart. A loyal Moslem, she was in some ways a peculiar mixture of the East and the West. She believed that a woman's place, especially if married (which she was not), was in the home, and yet she herself was a leader in the cause to improve the position of her sex. She claimed that the hampering traditions, old customs, and home practices that had long held Eastern women in bondage had little to do with the basic teachings of Islam. One example was the veil. Another was the practice according to which women had to keep in the background when men were present. Somehow through the ages certain habits of dress and modes of home life had been adopted and followed unquestioningly until they were thought to be handed down from the Prophet himself.

Souad's training in a Syrian school and in the American College at Damascus had included several courses in homecraft, and later she had also taught in that field. When in 1946 the Near East Foundation undertook to organize a rural demonstration in Syria and proceeded to start with home welfare, Souad Ajlani was induced to work with the American supervisor then in charge of this program. As the inevitable problems began to pile up, she was appointed by the Ministry of Education to take over the liaison between the Syrian Government and the American Foundation.

Josephine Vogt, after appraising the situation with a critical eye, decided to concentrate chiefly on the home center at Nashabeyeh, which had been established a few months before her arrival. She

determined that here at least the staff should live in the village and not come in daily to work as they had been doing. She also decided to look for other suitable villages of this type in the general region and eventually to eliminate the center in the town of Douma, even though the meetings there were large compared to what could possibly be expected in a little community such as Nashabeyeh. Moreover, she was determined to try to save the home at Jeramana.

While the line was thus held for the time being in Jeramana and Douma, Josephine and Souad devoted as much time as possible to improving the home at Nashabeyeh and launching a new center in the village of Babbila. At Nashabeyeh they improved the buildings and engaged a nurse-midwife who was to live at the center. Although the woman had agreed to this special requirement, when she came actually to reside in such a primitive, out-of-the-way spot the idea no longer appealed to her. Moreover, the other staff members who continued at Douma and Jeramana did not have to stay on the job twenty-four hours of the day. She became dissatisfied and in a few months had to be dropped. It was then that Amineh Bitar was engaged.

Still other and more serious problems lay ahead. Josephine had been on the job only a few weeks when the political situation in neighboring Palestine became even tenser than before. Partition of the country had been suggested, debated, and finally recommended by the Security Council of the United Nations. Every patriotic Arab considered this a personal affront. The United States was known to be the chief sponsor of partition, and as a result Americans on the spot and the organizations they represented began to note a sudden coolness on the part of Government officials and private citizens. The coolness shortly changed to an attitude of definite antagonism. Cooperation was difficult to enlist and hard to maintain. The work in the centers was seriously affected. In fact, as the tension mounted toward the end of November, 1947, the Government requested that all activities stop.

Hardly had these instructions been given when cholera broke out. The disease came in from Egypt, where the epidemic had been raging for several months. Without warning, there were two deaths

in Babbila, in which the new center had been opened only two weeks before. Then had come the order to suspend all Foundation projects, and now this drastic action was sealed by a frightful disease with its immediate toll of death.

But Eyer, Vogt, Ajlani, and, in fact, the whole staff rose at once to the new situation. Here was something in which they felt they could be of real service. In the emergency all thought of the regular program with its problems and setbacks was put aside in order to help in the fight against cholera.

Every reserve was thrown into the battle—all staff workers, cars, DDT, spraying equipment, and medical supplies. Babbila was converted into a hospital. The Government supplied a doctor. From a restricted demonstration area comprising only a few villages the campaign conducted by the Foundation reached out into forty-two communities. It was round the clock duty, and for two weeks the battle was waged without the slightest letup, not even on Christmas, New Year's Day, Sundays, or nights. When the critical period was finally passed, Josephine Vogt wrote to her home office as follows:

> It was an experience I shall never forget. Terrified infants and children fighting and screaming at the sight of the syringe; shy, veiled Muslim women dying a thousand deaths because of exposure of their bare arms in the presence of men; yes, even some of the men recoiled at the sight of the needle. And, by way of contrast, a few tried and some actually succeeded in being vaccinated twice, no doubt thinking it gave them double immunity! Others hid behind locked doors and the gendarmes had to pry them loose!
>
> New Year's Day, 1949—What a day! Five villages comprised our itinerary, and as we approached the last one, Deir-El-Hajjar, at five-thirty in the afternoon, it was already dark as pitch. As our gendarme guide directed us across the sticky, slippery, plowed field, our progress was halted by a deep irrigation ditch. The gendarme ran to the foot of a steep hill, fired a couple of volleys, screamed a message to figures which appeared at the summit, and before long, men carrying long-handled shovels and lanterns came dashing down the hill. With stones and mud a jeep-wide path was levelled across the ditch and we proceeded a short distance farther when we were stopped for good by a stream. The men jumped across, but Miss Ajlani and I needed just a little more help, so rocks were

piled to form stepping stones and we walked across to reach the other side, where two horses waited to take us up the long steep hill for the last lap of the journey! Here in a small room by the light of three kerosene lamps, two hundred people were vaccinated.

In Babbila the situation had been quickly brought under control; the disease never reached epidemic proportions in Syria. By mid-January the tide turned, and the quarantine covering the country was lifted. The staff began to think once more of their regular work.

High officials of the Government, to say nothing of the people residing in the afflicted area, had been greatly impressed by the spontaneous way in which the Foundation director and his cooperative staff had risen to the emergency. The attitude everywhere became more friendly again. It was thought that now the program could be resumed; but for some reason the necessary permission was not forthcoming. Weeks dragged by, and Vogt and Ajlani went from one Ministry to another to induce action. Finally, late in February, permission was granted and work started once more.

By then, however, the fighting in Palestine had developed in earnest. Arab refugees began to pour into Syria from neighboring Palestine, and the economy of the country became strained. American intervention was again blamed, and it even became dangerous for an American to appear on the roads. The United States Legation proclaimed a state of emergency and warned American citizens to be prepared for quick evacuation in case the situation should become worse.

In spite of these constant interruptions and upheavals, the program was somehow kept going, if on a reduced scale. This was due in no small degree to the persistence and patience of the staff, who were determined that the struggling department they had inherited should survive. In some way high Government officials and the humble villagers must be made to understand that individual Americans had nothing to do with this unholy war and wanted only to help. Many did understand, with the result that the program never quite came to a standstill.

Occasionally unfortunate instances turned out to be blessings in disguise. At one time a certain sheikh, or religious leader, of Babbila

arose in the mosque and harangued the congregation on the terrible deeds of Americans and the evils of having anything to do with an organization which was really "nothing but a Zionist front operating under a different name." Word of the incident spread, and the people were sullen. But something else happened before much damage was done.

The mukhtar of Babbila was in addition a descendant of Mohammed—Abu Hamdi was a little old man with a long but sparse beard and twinkling eyes. When the center in Babbila was first contemplated, this kindly old man had promised his full support if only work of such importance were established in his village. He never went back on his word and through all the most serious trouble proved to be a great tower of strength. On this occasion, he found the sheikh who had aroused the people and marched him back to the mosque. There he forced the man to make a public retraction of everything he had said. And thus ended the affair.

On another occasion there were murmurings in a few of the villages against the organization. But the agitation had hardly been noticed when the first secretary of the President of the Republic visited the work. It was a quiet and unobtrusive stamp of approval on the part of the highest official of the country. The complaints immediately ceased.

One would hardly expect to find much progress after such interruptions and frustrating events, and certainly little optimism on the part of the staff. Yet Josephine herself was cheerful and confident when she reviewed developments in her June report to the home office.

Nurse Bitar had changed the whole atmosphere of the Nashabeyeh center since she had come to live in the place. She had made it her personal home and, in so doing, had added little touches here and there that gave it a homelike appearance. More women attended her instruction, and the nurse visited them in their homes more frequently. All this was the direct result of living on the job.

Miss Bitar, too, had put her experience in Kuwait to good use. She had developed interests outside and beyond her special field and

was much concerned about the lack of sanitation, not only in the home but in the community generally. On one of her tours of the district, she discovered a dirty pool in the midst of a village. It was an ideal breeding ground for malarial mosquitoes, and the dangerous insects were multiplying by the million. Bitar managed to enlist the support of the men and had the unhealthy place filled up.

Even in Babbila, where the program had started but a few months before, only to suffer constant interruptions, results had been achieved. Several of the girls were such enthusiastic students that they suddenly began to appear at four thirty in the morning. The home welfare leader patiently explained that this was just a little too early to begin their instruction.

In August, 1948, the centers began having "at home" days, when the women of the village were received for tea and informal visits. In Babbila twenty mothers appeared on the first of these occasions. Hereafter the women came every Wednesday to enjoy the hospitality of the home and to look around with curious eyes. It was hoped that these social events might prove to have educational value in addition to providing the opportunity for friendly meetings.

At about this time Josephine Vogt also began a more systematic though informal program of staff training. Each Friday morning she held a meeting at her own home to plan programs, discuss ways of reaching objectives, and consider local practices that needed to be changed. More and more emphasis was laid on home visits and on translating the instruction at the center into better practices in the homes.

It had taken several months before Vogt could complete the working team in each of the two developing centers by securing qualified home economics leaders. Here again the difficulty was not to find a person with proper qualifications but to locate one who was willing to live in such an out-of-the-way place. Rather than compromise on this point, Vogt decided to go ahead with the program as best she could without qualified help. The nurses rose to the occasion and proved not only cooperative but versatile. They proceeded to handle the homemaking aspects of the program even to

the extent of teaching the three R's to their eager students. Eventually Vogt's patience was rewarded when she found Fikrat Sawaf and Lydia Najjar.

On the home economics side, the girls and young women were engaged in all sorts of activities. They were cooking, canning, preserving, gardening, sewing, and making garments for themselves. The pregnancy of one of the mothers who was making regular calls at the clinic afforded an opportunity for those learning to sew to make a complete layette. And there were always reading and writing and numbers. As has been pointed out before, these classes often proved to be an embarrassment, for they tended to leave in the minds of officials the impression that the Foundation was operating a "school." This was not at all their purpose. There was another difficulty. The desire on the part of the village women to avail themselves of the opportunity for education resulted in constant pressure to admit girls of a much younger age than the centers were intended to serve. However, the removal of illiteracy among the female sex was clearly a long-felt need, and classes therefore had to be included, at least at this stage, in a program of home economics.

Here and there, signs of definite progress began to appear in the homes. One of the girls was found to be using a toothbrush, "all her own." The same young lady arranged a net to protect her five-month-old baby sister from flies and insisted that relatives and friends stop the unhealthy practice of kissing the baby on the mouth. Several of the mothers were gradually learning to nurse their babies on schedule instead of thrusting their breasts into the mouths of the infants at the first whimper. Little kitchens with a few inexpensive accessories were beginning to make their appearance. Screened cupboards for food were to be seen more frequently.

One of the customs most difficult to change seemed to be that of binding the babies. A local midwife, undergoing retraining, was discovered making postnatal calls on a mother whose baby she had delivered a few weeks before. The infant was bound, but at least there was no black powder in its eyes, nor was green herb smeared over its body. When the child was unbound, it was found to be clean and covered with soft talcum powder. Changing the old pat-

tern was a day by day, on again, off again process, to quote one of Josephine's phrases.

To make any headway at all required not only patience, but the utilization of every little incident as a means of instruction. One day, in Babbila, a mother with her two-month-old infant was awaiting her turn to see the nurse. The baby had an attack of hiccoughs; with a mother's solicitude for her child, the woman quickly pulled a thread from its blanket, chewed the piece into a soft, wet ball, and deposited this on the little tot's nose. Then she waited for the remedy to produce its result. Miss Zafari used the opportunity to demonstrate a more effective method of dealing with hiccoughs.

To turn now to the present. As this is written, the home welfare work in the various centers is fairly well established—an achievement worth noting, in view of the many hurdles which had to be cleared. A much more adequate budget has recently become available. One immediate result is that additional centers are to be opened to cover more effectively the area selected for the rural demonstration. The trend already noted of transferring activities from the centers into the homes must continue. More study is needed to determine what home practices can properly be modified or changed. As such information increases, the program will become the more effective.

A department of rural sanitation is now supplementing and supporting the work in home welfare; this important activity is in the capable hands of an enthusiastic young Syrian who is under the direction of a public health doctor. At long last a plan is unfolding to provide these farming communities with practical assistance in their agricultural problems.

If the foundation stones of better farming practices and improved sanitation had first been firmly set, the accumulated evidence * indi-

* Still further proof of the importance of correct procedures in dealing with the problems of home improvement has been provided since this chapter with its concluding paragraph was written. Notwithstanding the painstaking effort described in the preceding pages to make the Babbila center effective, the project finally had to be terminated in early 1951. Deep-seated suspicions of many of the people made it impossible to enlist the local cooperation that was essential if the center were to contribute effectively to the well-being even of those who appreciated the work. And so with great reluctance and notwithstanding the vigorous protests of good friends in the

cates that not only would the home welfare department have progressed much more rapidly but even the political tensions of the area would not have been such a serious handicap.

---

village the center was closed.

In the meantime, an agricultural extension leader in another village of the same district had contributed enormously to the economy of the people through the introduction of better seeds, the application of fertilizers, the organization of a cooperative, and improved sanitation. As a result the village elders pleaded for the addition of a home welfare center and offered to provide suitable quarters rent free. Several months after the closing of the Babbila project a home improvement program was organized in this other village with the result that, in certain important respects, more has been accomplished in less than one year than was achieved in Babbila in over three years. It is safe to predict that the work will continue to thrive.

[CHAPTER IV]

Include Recreation

[LEBANON]

UP to now our concern has been primarily with efforts designed to raise living standards. A program of rural reconstruction is not complete, however, unless it serves also some of the cultural needs of the people. The present chapter therefore takes up the subject of recreation from this point of view and shows also that even this type of activity can inspire both youth and adults to greater productivity.

Not long after the last shot was fired in World War II, the office of the Near East Foundation in Athens received an unusual petition. It came from the village of Aghion Pnevma, in the northern part of Greece not very far from the Bulgarian frontier. The communication was signed by a committee of five; they identified themselves as members of a prewar organization known as the Future Farmers of Greece, which had been an important feature of the Foundation's Macedonian program in the decade preceding the war.

The letter was a plea for assistance after the years of widespread destruction. But strangely enough it was not a request for food and clothing or even for help in reconstructing their farms. Instead the writers spoke of their hunger for the social and cultural amenities which they once had enjoyed. They reminded the Near East Foundation of the recreational department of its former Macedonian program and of what had been achieved in their village under the director, Theodore Pays. They spoke of their reading room and recreational center, of the little orchestra which used to tour nearby

villages. They mentioned with pride the "excellent all-wool flag" which once had adorned one of their clubroom walls. They recalled the 500 books they had had in their library, the stage costumes and curtains which were used when they put on a play, and their games and athletic equipment.

Sadly they reported that all of these precious things had been destroyed when the Germans invaded the country. In this region the Bulgarians, allies of the Germans and bitter enemies of the Greeks, were given a free hand to raze the villages, and they had done a thorough job. According to the letter, the "barbarians" had broken into the reading room, burned the books, torn down and trampled their flag, destroyed their theatrical equipment, and smashed the furniture. The only thing left to remind them of their former activities were the big pine trees; these had been planted long ago as one of several community projects which their club had helped to promote, and they now covered the hills. "Please send us Pays to help reorganize this program of recreation and social improvement"—so ended their plea.

The letter was indeed a sad reminder of former happier days, of progress stopped by the war, and of the suffering endured by these people and by millions of others. At the same time, this message from old friends gave rise to the hope that some of the threads of the Macedonian project might one day be taken up again. Meanwhile a new enemy, emerging out of a former ally, began to use the northern frontier regions of Greece as a spearhead for fresh aggression until the whole nation was once more embroiled in a bitter struggle for existence. No doubt Aghion Pnevma itself suffered new devastation, for it lies in the midst of this troubled area, and it is safe to assume that more than one of the five signers of the letter were among the 700,000 refugees who fled from the Communist guerrillas. At present writing the situation has quieted, but the final outcome is still in the balance. Under the circumstances the urgent plea of those who not so long ago called themselves the Future Farmers of Greece had to be shelved for the time being.

In other and less harassed lands, however, activities are being organized which aim to satisfy the need for recreational facilities

among people with few material blessings. As an example of a rural reconstruction program which successfully incorporated such activities we turn to another Near Eastern country, the Republic of Lebanon.

The Near East Foundation had initiated rural programs of one kind or another in Lebanon over a long period. During most of this time activities were concentrated in a small area, known as the Bekaa Valley, which lies between the Lebanon and Anti-Lebanon mountains. Before World War II the work was conducted in cooperation with the American University of Beirut and was frequently used, in part at least, as a laboratory providing study material for that institution. The various projects could hardly be called demonstrations, but they provided valuable experience, a place to make social studies, and at the same time they proved of service to the inhabitants of the region.

When the war ended, the program was reorganized and brought more in line with accepted procedures of rural extension programs. In a short time the modest projects were enlarged to include most of the features of a comprehensive approach to rural improvement. There were departments of agriculture, sanitation, and home welfare, all united under an over-all program directed by an energetic American organizer.

Recreation was eventually added, and this the director called the division of social-cultural activities in order to emphasize the broader aspects of such work. In this chapter the gradual development and expansion of these activities will be given major attention; other features of the Lebanese program, though their importance is recognized, will be dealt with only incidentally.

As is so often the case when outstanding progress is achieved in any field of endeavor, a particular personality was in large measure responsible for the success of the venture. This was Mr. Hanna Khouri.

Hanna Khouri, a Bedouin by ancestry, was a member of a Christian tribe of southern Trans-Jordan. His grandfather's entire life was a tent existence as he followed his flocks; Hanna's father lived his early years in the desert before moving to a village where mem-

bers of the tribe practiced a more settled type of agriculture. It was in this small community of Bedouin farmers that Hanna spent his childhood. Later his parents moved to the town of Kerak, where his father served as lay priest in the Greek Orthodox Church.

Always fond of the open spaces, Hanna went every summer to the village where his elder brother had a farm. He delighted in going out to the desert tent of one of his Bedouin cousins and in listening to the tales of adventure which the Bedouin men tell so well. These early impressions were to affect the whole life of this boy and later were a large factor in the valuable contributions which he made to the cultural and economic life of his people.

His early schooling was received at Kerak; from there he proceeded to the English college in Jerusalem and graduated with a diploma roughly equivalent to a freshman certificate. Then for twelve years Khouri taught school, mostly in a small village in the north of Trans-Jordan.

During his teaching career Hanna Khouri engaged in two extra-curricular activities; one was scouting and the other was the study of his people and their environment—in fact he combined these two interests. With his scouts he studied the birds, animals, and flowers of the countryside and the folklore of the Bedouin tribes. Together they visited the villages and the tents of the nearby desert where, under the direction of their leader, the boys put on little shows, sang Bedouin songs, and demonstrated their ability to perform the native dances. Khouri also enlisted the help of his scouts to promote projects of community improvement, such as planting trees by the roads, beautifying public squares, and helping with clean-up campaigns. With the assistance of another instructor, he formed a club to spend weekends in the country and to facilitate study of the problems of the Bedouin people.

After years of such varied experience, Hanna returned again to college studies, this time at the American University in Beirut, where he completed three years of study for his B.A. degree. He participated in a great number of extracurricular projects of a social welfare nature, foremost among them the Village Welfare Service. The V.W.S., as it was called, was a means by which the university hoped

to develop social consciousness among its students, many of whom were enjoying education to an extent which is normally denied the majority of people in that part of the world. A major feature of the V.W.S. was its summer camp, which was always in an appropriate spot somewhere out in the country. There the students who were interested in athletics would teach the children games, those majoring in education would conduct evening classes for illiterates, and the men studying medicine would help organize clinics. Hanna Khouri directed this work during two seasons, and he never forgot that the chief beneficiary of these activities was meant to be the student himself. Thus he avoided many of the mistakes of his predecessors.

In the summer of 1945, Hanna located his V.W.S. camp in the Bekaa Valley, at the foot of the eastern side of the Lebanon mountains, in the region of the Foundation's reorganized program. Under his experienced management the site chosen for the camp lay apart from any of the villages included in the demonstration. Khouri knew that the boisterous ways of energetic youths might not always be understood by the conservative peasant and might in themselves defeat the ends he had in view.

The camp had not been functioning long, however, before Hanna Khouri began to chafe under his own restrictions. While his youngsters were kept busy on the things they could properly do, he had denied himself the chance of getting in close touch with the people of the region. He felt the lack of opportunity to get acquainted with his neighbors, to learn something of their problems, their way of life, and their needs. Finally he decided to leave the camp in charge of an able assistant, and he went out to Bar Elias, one of the most primitive and backward of the Foundation's group of villages. It was a Bedouin settlement, an added inducement to Khouri. The two thousand or more inhabitants of the place, divided by numerous factions and friction, constantly interfered with constructive endeavor. The Foundation had conducted various projects of one kind or another in this rural center for a number of years, but little real success had ever been achieved. Khouri set himself the task of finding out the reasons.

His stay, which lasted six weeks, proved to be a profitable experience for all concerned—the Near East Foundation, the villagers, and Hanna Khouri himself. One of his first moves was to adopt the native headdress, the kaffiyeh and agal. A square piece of white cloth folded into a three-cornered triangular shape makes the kaffiyeh, and this is held on with a heavy black cord, the agal, which circles the head.

Hanna spoke to the people in the desert dialect of the Bedouin. Since it was the month of Ramadan, the time of fasting, they could not take food before sunset, and they were not permitted to eat after three in the morning. The men would sit around during the night, chatting and talking while they nibbled at the food they had brought. As soon as the early cocks began to crow, they went off to bed. Although Hanna had to be up by seven thirty, when the Foundation's nurse rode in from her home some distance away, he kept vigil with the men and took part in their conversations.

There was an extra room at the clinic, and this he converted into the social center of the village for his evening gatherings. To these he invited the local poet, who played the rabab, a one-stringed violin which is a great favorite with Bedouins. As the month of Ramadan wore on, the nightly affairs became more and more popular, and the place was usually crowded until it was time for the last bite of food and then sleep.

Soon after Hanna's arrival in the village, a group of older girls approached him to ask if he would teach them reading and writing, since the village had no school for girls and all the women were as a result illiterate. This was a delicate question, and Hanna delayed his answer until he could consult several of the village elders. To his surprise they encouraged him to grant the request, and a girls' class was started. They came every day at two in the afternoon for an hour or so of instruction.

One day, late in the afternoon, a group of young men stopped at his headquarters to ask if he would help them put on a play. It was just the sort of opportunity for which Hanna had been waiting. Within two or three days a suitable play was found, parts were assigned, and rehearsals began. After four weeks of practice, the actors

were ready and the date was set for the performance. At this point, however, a serious problem arose. The Minister of Health had been invited to be the guest of honor, and a host was needed to receive the Minister together with all the other guests who were to be invited. Who should be the one to enjoy this special privilege? A meeting was called, and the discussion became heated. Everyone desired to play the host, and no one was willing to give way. The issue was reduced to a choice among four men from the "leading" families of Bar Elias. Midnight arrived with no decision in sight; it looked as if all the old enmities were going to be revived again. Hanna decided the time for drastic action had arrived. He rose and stated that as far as he was concerned the discussion was ended. He would give them until the next day at noon to come to an agreement. If by that time they had not reached a decision, he would cancel the play and apologize to the Minister. The arguments calmed down, and Khouri went off to bed.

The following morning he was invited by the group to join another meeting they had called but he flatly refused, stating that if he did not have their answer by twelve o'clock he would cancel the whole affair. At about eleven thirty he was invited to the room where the men were assembled and on entering found everyone smiling. They welcomed him and announced proudly, "We have agreed among ourselves that Housain Araji should represent us as host; go ahead with your plans." The man they had agreed upon was not one of the four contending parties.

At last the great day dawned, and although the big event was not to be staged until evening, the whole day was made a festive occasion. Early in the morning young men began to parade about the town, dressed in their best. Bedouin women in their colorful costumes rode about on their camels, while the men, carrying Lebanese flags, went back and forth on horseback.

At about six o'clock in the evening the special guests, including the American Consul, the Governor of the Bekaa, university professors, and the Minister of Health, assembled for refreshments at the picturesque little town of Chtaura, five miles from Bar Elias. From here they rode to the village in a procession of cars led by gendarmes

on motor cycles. Outriders on fine Arab horses displayed their skill along the way. At one point two camels decorated with colorful rugs and bearing the Lebanese flag came into the procession. When the cortege turned off the highway to take the road leading into the village, it was greeted by a committee on horseback who fired pistols into the air as a sign of welcome. People in picturesque dress lined both sides of the road. At the entrance to the village the guests were greeted by a band from a neighboring town which had offered its services for the occasion.

Nor did this end the preliminaries. The guests now assembled at the home of the host to have more refreshments before going to the performance. Finally the hour came. They were taken to the outdoor theatre, which was the village threshing floor. By the light of kerosene lanterns ushers guided the invited guests to their seats.

The stage was a platform about four feet high, erected for the occasion and covered with Oriental rugs. More rugs, suspended from clotheslines, provided the background of the stage and the curtain in front. The lighting was supplied by kerosene pressure lamps.

About three thousand people from Bar Elias and the surrounding villages attended this historical event, but only a small proportion of the audience had seats in the "theatre." They crowded on the roofs of the houses, lined the nearby walls, and stood in the shadows. The play lasted about two and a half hours. It was, of course, in Arabic, but the story was relayed to the Americans present by an interpreter who sat close at hand. The Americans applauded good acting with the usual clapping of hands; the local onlookers, however, shot off their pistols as a sign of approval.

The play ended just before midnight. It had been a wonderful success. Most of the spectators had never seen a play before, and many had never heard a band. It was the first time in the history of the village that so large a number of the citizens had worked together for one common objective. Family feuds had been put aside, the monotony of peasant life was relieved, and the ground was laid for cooperation in other ways for the improvement of the community.

Soon after this event came the time for Khouri's departure. His

experiment had come to an end, but he had learned much. As he sat in the car which had come to take him away, a crowd of the villagers, including all of his young actors, stood by with tears in their eyes. Hanna himself felt his throat constrict, for he too had come to have a deep affection for his new-found friends. He felt that he would always be received back in this community with a warm welcome. And go back he eventually did.

The year that followed was spent by Hanna Khouri at the American University of Beirut, where he taught a few courses in sociology besides devoting much of his time to the many social service activities on the campus. But many people were convinced that the right place for him was in creative work among the rural Arab population. The Near East Foundation is always in search of this kind of man, and therefore, with its own needs in mind, the Foundation offered Hanna a one-year scholarship to do graduate work in rural sociology at Cornell University. In return for this grant the organization was to have first option on Khouri's services upon the completion of his studies.

After twelve months in the States, Hanna returned with a master's degree. He was immediately assigned to the Foundation's demonstration in the Bekaa to organize and direct a department of recreation or, as it was termed, the division of social-cultural activities.

It was natural that Hanna's thoughts should turn first to Bar Elias and his friends of two summers before. The news of his arrival spread quickly, and the boys of the village came to greet him warmly. They reported that they had often talked of those pleasant weeks Hanna Khouri had spent amongst them. Sometimes when they met they recited from memory lines of their play. It was easy to see that these healthy adolescents needed something constructive to do in their leisure time, and only a little direction was required to harness their abundant energies. Hanna decided that a club was the best answer to their needs, and he encountered not the slightest difficulty in enlisting their interest.

They held their first meeting, elected officers, and, under some guidance, began outlining a constitution. As soon as it was suitably defined, it was placed in the hands of the appropriate Department

of Government for approval, as such an organization could operate only with a permit. This done, they began to plan their activities. They formed subcommittees to foster various constructive endeavors. There was a social committee, an agricultural committee, a committee for village improvement. They found a place with two rooms where they could meet regularly, play indoor games, and read books. With the assistance of Khouri they secured a radio which operated on dry cells. They made plans for a library to be used by the whole community; they lined the road leading out to the highway with trees; they cleaned up the yard of the mosque and planted it with trees, flowers, and shrubs. One room of their center was made the village headquarters of the Foundation's agricultural agent. Within a few weeks the Bar Elias club was well established, with the members busily engaged during their free time in a great variety of constructive activity.

Hanna Khouri now turned his attention to the village of Marj, which was on the other side of the highway, only two or three miles away. The people of Marj, who numbered some twelve hundred, were not Bedouins, and their forebears had been tilling fields and growing crops for many generations. They were therefore somewhat better farmers and slightly more prosperous than their neighbors at Bar Elias; but they were no less opposed to innovations, and there were the same little feuds between families and groups which make cooperation so difficult. Hanna was, however, fairly well known among them, for all had heard about the famous show in Bar Elias two years before, and quite a few had been to see it.

On one of his first visits to Marj a group of young men gathered around and suggested that they too would like to put on a show. Here was the opening for which Hanna had hoped, but he preferred in this case to use a somewhat different approach. He countered with the suggestion that they first band together and form an organization which might attempt a play as one of its first undertakings. The idea met with general approval, and before long they had elected their officers, had drawn up an appropriate constitution, and had procured the necessary approval from the Government. For a small sum they rented suitable quarters for their center, and

they furnished the place themselves. They appointed their committees and discussed plans for the future.

A play was to be their first activity, and within a few weeks they were able to show off their talents as young actors. The event was similar in many respects to the great show at Bar Elias, though Hanna decided not to have quite so much fanfare. Still it was a festive occasion, and there were more than twenty honored guests. A stage had been erected by the side of a house, and at least a thousand people filled the space in front and the neighboring roofs and walls. It was another big event in the annals of the region, and the day after the performance ten more young men applied for membership in the club. The work in Marj was off to a good start.

Here too, as in the village on the other side of the highway, the club was made the channel for many types of constructive projects in addition to the ordinary recreational activities such as football, volleyball, indoor games, and social gatherings in the evening. The club rented a plot of land and started a small agricultural project under the direction of the Foundation's agent who made visits to the village. Hanna scored a great success when he began showing Kodachrome slides of pictures he had taken in the village. Grown-ups as well as youngsters could hardly contain themselves in their excitement when they saw their own images on the screen. It was an excellent opportunity to emphasize a few important lessons even though the pictures were not taken with that thought in mind.

It was not long before the girls began to get restive after hearing about the new organization of their brothers. They too wanted a society. This was a radical innovation for a conservative Moslem village, but since Hanna had been permitted at Bar Elias to enroll girls for instruction in reading and writing he felt safe in granting the young women's request. They were assisted in forming a club, and among their several activities collected funds to furnish poor children of the community with food, clothing, and toys.

Hanna had larger objectives in mind. He hoped to reach the older generation through the young. Valuable as his youth movement was, he realized that it could not have, under the patriarchal system of a Moslem community, the same freedom or the influence

on parents that is found in the West. Nevertheless he decided to explore further possibilities. He began to train young men to do specific things to assist their fathers and neighbors. They organized spraying campaigns to control crop pests; they helped families to install sanitary latrines; they drew up a list of improvements which the community needed; they started making plans for an agricultural exhibit. In such ways as these the young club members could draw the attention of their fathers to the usefulness of their organization.

While spending much of his time in Marj and Bar Elias, Hanna was also promoting his program through the whole area, and thus the months quickly passed. As spring and then summer approached, with more and more work in the fields, social and community activities were confined mostly to the evenings. It was opportune, therefore, to take stock of what had so far been accomplished, particularly in the district which Hanna considered his laboratory.

The two clubs were functioning well. Their influence was beginning to reach into the lives of the older generation. Reports showed that 850 persons had used the indoor games during the winter months. The youth of the two villages had participated actively in a variety of sports. Volleyball and football were the two outdoor games they liked best. They had developed a new method to promote competition. Instead of organizing teams on strictly village lines to vie with one another, the clubs of the two centers interchanged their members in order that the one best suited for a position should get that assignment. Thus a single team would be composed of boys from both places. This plan helped greatly in reducing local frictions and undue rivalry. The clubs had good libraries with a constantly growing circulation in spite of the widespread illiteracy which prevailed. Each group subscribed for one daily paper and one weekly magazine in order to keep in touch with the outside world and to provide good material for discussions. There was also the radio, which served many useful purposes. The agricultural agent who came periodically to these villages now found that his suggestions were more readily received. The confidence of these people, who had for years accepted the free services of the

Near East Foundation with a certain skepticism, had finally been won.

In the four years during which the Chtaura demonstration had been in existence the American director of the program had laid a solid foundation for rural improvement. Departments of agriculture, sanitation, and home education were operating successfully in their respective fields. With the addition of his social and recreational activities Hanna Khouri had rounded out the demonstration and given it added vitality. The approach which Hanna had adopted was beginning to bear fruit.

Then quite unexpectedly he was presented with the opportunity to apply his ideas and organizing activity on a still wider scale. Before another year had elapsed, Hanna found himself in charge of the entire program. The ups and downs to which private philanthropy is frequently subjected resulted suddenly in the loss of the American director. Income from contributions in America was declining, and the budget had to be balanced. One means of achieving this goal was to sacrifice the American technician, and Hanna Khouri was his logical successor. It is the policy of the Foundation in the development of any program eventually to replace American supervision with local leadership as talent emerges with suitable training and experience. Frequently financial and other conditions speed up the process which otherwise might be considerably delayed.

Hanna soon discovered that administering a program of this type brought with it many difficult decisions. The elimination of American direction had not resulted in all the savings required, and further reductions had to be made. The head office in New York suggested cutting out one department. They mentioned home welfare, since this would bring expenditures down to the budget approved; furthermore, it was known that the work of that section had never been as effective as might be desired because it had been impossible to find leaders who would live in their villages.

After weighing the problem from every angle, Hanna requested permission of the New York office to make his own adjustments providing he kept within the budget allotted. His request was granted, and he set to work. As he was unable to maintain two or three

workers in the department of home improvement, he decided he would at least have one, and he chose an experienced nurse-midwife who was not only willing to live in a village but also to stay there alone. However, in order to retain even that one person he had to effect savings elsewhere. He eliminated one or two employees who had not been too energetic in their work, and he required the remaining workers to live on the job. This measure enabled him to make drastic cuts in transportation with a corresponding reduction in costs while simultaneously raising the efficiency of the work.

Other changes here and there, although minor ones, had the combined effect of considerably improving the whole program. He shifted the emphasis of the small agricultural station, located at the central village, from experimentation to more practical application. He transferred certain of the experiments at the station to outlying villages where the results could be immediately observed by the farmers and checked against their own yields. He saw to it that the young club members assisted in this work and encouraged his staff to channel as many of their activities as possible through the youth organizations he had built up.

With his added responsibilities, Hanna could now no longer apply himself exclusively to his own special field. During his ten months as supervisor of one section of the program, he had concentrated rather heavily on Marj and Bar Elias—the two villages which had served him as a laboratory. Now that he was reorganizing his staff, he decided that he wanted one person to protect and expand the work he had started there, and he felt sure that he knew just the man for the job.

While he was at the American University of Beirut, Hanna had observed an energetic young man called Victor Aramouni who was active in all kinds of civic affairs. Victor Aramouni had recently graduated from the university, where he had majored in sociology, and he was looking for a position. Although Victor was a Christian and, as has been noted before, both Marj and Bar Elias were conservative Moslem villages, Hanna felt certain that Aramouni could overcome this handicap. The young man was willing to try and was hired.

There was much in Victor's background which seemed to fit him for the work. His parents had been Lebanese farmers living off a small plot of land. Like most of their neighbors, they were always in debt. Poor as they were, however, they insisted on sending their son to school. His father died when Victor was only a child, but his mother kept the boy at school while he helped her with the farm work in his spare time. Later she induced a boarding school to take the boy and let him work for his keep. He waited on table, did kitchen chores, swept the dormitories, ran errands. He had no money for books, but his classmates loaned him theirs. Vacations and summers he worked at home on the farm.

On finishing school he was determined to go to the American University of Beirut where, since he had no money to pay fees, he had first to find himself a job on the campus. After one year he was earning enough to enroll as a freshman, and he continued to support himself entirely by his own efforts for the rest of his college career.

In his later years at the university and in spite of having to earn his living, he began to participate extensively in extracurricular projects of a social welfare nature. He was active in the Welfare League, had charge of the night schools organized by the students for the poor and underprivileged of Beirut, and took part in the activities of the Village Welfare Service.

It was at this stage that Victor came under the observant eye of Hanna Khouri, who was certain that the young man possessed latent talents which should one day be put to good use. Now that Hanna was looking for a suitable man to take charge of the activities he himself had started, he naturally turned to this stocky, persistent little man who, with a farm background, university training, and years of struggle behind him should make an excellent leader to teach village people how to utilize their limited resources in improving their lot.

Victor took up his headquarters at Marj and set to work immediately. On the advice of Hanna, he directed his attention, first of all, to the clubs. He added several sets of indoor games; posted rules for the use of the games, the books, and the club in general; and de-

signed, with the help of the boys, a special seal and then used it on books, letters, and papers. He made several additions to the library and subscribed to two more daily papers. He painted the two rooms of the Marj center, fenced the adjoining yard, and installed a latrine. On the walls of his centers he posted various slogans. Two of these deserve to be listed here: Our aim—to see a better community; Our means—knowledge, cooperation, work.

With these improvements on the way Victor began to embark on various educational and social activities. He organized discussion groups; gave talks on topics of general interest; held night classes in Arabic for those who could not read and write; and since he served as agricultural agent as well as recreational leader, visited the farmers in their fields and held agricultural meetings. As many of these activities as possible were channeled through his clubs. All weddings and funerals found Victor in attendance, for this was a way of getting better acquainted in the community. Like Hanna before him, he adopted the headdress of the Arab fellaheen.

One scheme that was pending when Victor arrived was the matter of staging an agricultural exhibit. Hanna Khouri had started the wheels in motion by discussing the idea with farmers throughout the area, and they decided to go ahead with the plan. Victor now backed the project by boosting it in Marj and Bar Elias. Although they had never before participated in anything of the kind, the villagers showed considerable interest, and their enthusiasm increased as the arrangements developed. Then suddenly the Ministry of Agriculture and the local officials decided that this was a great opportunity for them, and they took over the project. Khouri did not mind in the least; on the contrary he was glad to see the Government support such an enterprise, and he and his staff pushed the matter all the harder.

The exhibit was held on the twenty-sixth of September and proved to be highly successful. An old, unused hotel was put into service by the farmers for the display of their many products. One section was devoted to the new varieties and experiments of Khouri's agricultural station. On the grounds surrounding the building, local dealers exhibited the latest farm machinery; beyond, in the shade of trees, the animals were tethered.



The school buildings were usually modest structures (Makerka, Eritrea).



The Adi Caieh school for both boys and girls was built entirely through local voluntary subscriptions.



Spinning and basketmaking class at the Asmara girls' school. They prefer to sit on the floor.



Classroom in the village of Merrara. Three girls are in this group, two on the left, one in the center foreground.



One of the fourteen school teams at the annual sports rally in Eritrea.



The summer day nurseries of the Macedonian Program were popular.



Eritrean employees of the Government (British Military Administration) learning to type.



Sophia Kyriakou of the Macedonian Program as she started for an outlying village.



Supervisor Moussouros touring the villages of agriculturist Theodorou.

This exhibit offered an excellent opportunity for the distribution of the pamphlets and bulletins which had been prepared at various times as a part of the Foundation's educational program. One little leaflet written especially for the occasion gave the results of certain experiments with recommendations to the farmers.

Over five thousand people from the surrounding countryside attended the exhibit, which was the first of its kind in the whole region. The Ministry of Agriculture showed its appreciation to Hanna Khouri and his men by granting them a special award for their displays and adding an appropriate diploma which mentioned the service the program was rendering to the farming community. The whole affair gave new impetus to the Chtaura demonstration, and Victor Aramouni enjoyed his share of this added support, which was immediately forthcoming.

When the exhibit was over, Victor concentrated on other community activities and especially on projects designed to improve the village economy. The interest of the club members in civic affairs was never permitted to wane. They drained swamps, built more latrines, and conducted cleanup campaigns. They even constructed a road. In Marj there was a half-mile trail heading to a stream from which water was brought to the homes of the village. It was dusty in summer, muddy in winter, and terribly rough. Over this difficult path the women carried their heavy containers. The young men took on the task of building a stone road. It turned out to be a tough job, but they labored hard, they enlisted the aid of their fathers, and even the school children were excused from some of their classes to help with the work. The project was eventually completed to the great satisfaction of their sisters and their mothers.

Many of the young men were not fully occupied. Their parents had only small plots of land, and in such a community there were few opportunities for outside work. In an effort to increase local income Victor rounded up the youngsters who had plenty of time and induced them to form little companies to promote small business ventures. Two or three boys would be encouraged to combine their energies and limited resources to form a partnership. Then they bought wheat and other local products and sold these up in the mountains where such commodities were not readily available.

They hired camels and donkeys for transport. Six or seven such "business concerns" were soon operating with modest success.

The older generation faced similar but more serious problems. Farm incomes were exceedingly low, and the system of cropping resulted in poor distribution of labor. At certain seasons all the people were exceedingly busy; at other times they had little to do. Victor began to encourage both the young men and their fathers to learn certain trades, such as shoe repair, tailoring, and blacksmithing. Hemp was grown in the district, but no one engaged in rope-making, as was done in other sections. Aramouni therefore brought in a man from another village who taught fifteen farmers how to convert their hemp into rope on the spot. By this simple process the return from this crop was greatly increased.

Nor was the need to increase the community's income through improved farming overlooked. A fertilizer company of Beirut was induced to make deliveries direct to the village while charging the same price they received at the warehouse. The club served as the local agency, and the material was deposited at the center. The farmers saved considerably on their purchases, and it was good business for the dealer because the arrangement produced many more sales. As a result of the plan the number of farmers using fertilizer jumped in one year from 5 per cent to 75 per cent, with considerable increase in crop yields.

There was also the matter of insufficient irrigation. Bar Elias was gradually solving this problem by putting down wells. Marj had been slow to exploit its most valuable asset, a meandering stream which ran along the edge of the village. Most of the fields were still unwatered, and dry farming with the appropriate and rather unprofitable crops was the result. The possibility of the extensive utilization of this stream so close at hand aroused Victor's interest, but no one farmer could afford the cost of a pump, an engine, and other essential equipment. Determined to find a solution, Victor began to talk about the idea of cooperative effort without, however, losing himself in an abstract discussion of the principles or theories of cooperatives. He felt that if one good demonstration could be made, others would surely follow. He found a group of

five farmers with adjoining fields who appeared interested, but they were hesitant to invest their limited funds in a venture so new.

At this point Victor Aramouni decided to try an experiment. During his university days at Beirut, he had become acquainted with a woman of wealth who was interested in some of his welfare activities of that time. He now approached his friend to see if he could persuade her to give him the necessary backing for the first installation. She quickly responded to the idea and agreed to advance the required funds as a loan without interest. The equipment was purchased and installed, and soon water was raised from the stream and sent out over the land.

No further demonstration was needed. Little companies of three and four farmers, according to the location of their fields with reference to the stream, were formed under Victor's enthusiastic guidance. Before a month had passed, five units, each with complete installations, were drawing water from the stream to irrigate their fields. By the following spring cooperating groups were irrigating nearly a thousand acres of land. Not only did the fields yield larger quantities, but it was now possible to grow more vegetables, potatoes, melons, and similar crops which provided a much greater return in hard cash.

Victor started one other important development that should be mentioned. This had to do with the problem of health and thus further illustrates the many ramifications that may grow out of a social-recreational program.

The nurse-midwife who had taken up residence in Bar Elias came to Marj frequently, and she and Victor worked closely together. In fact, Victor's many contacts with the men of the village greatly facilitated the work of the nurse. She operated clinics for babies, conducted classes for mothers, visited homes. Although the nurse's chief aim was to emphasize disease prevention through health education, too much of her time had to be devoted to treatment. In the past the home betterment program in that area had always been under pressure to include more and more medical work. This is a service which the poor and the sick can see and understand readily, and it saves them considerable expense. Moreover, it is hard to with-

stand urgent pleas for medical help, but such work can easily divert an educational organization from its basic objectives.

Hanna Khouri had long studied the problem. He discussed the situation with Victor, and they decided to try group insurance as one means of solving the dilemma.

To inaugurate the scheme which they had in mind Victor and Hanna first approached a few families of Marj. They also managed to win the enthusiastic support of a good doctor who practiced in that region. The plan they developed worked somewhat as follows: A family participating in the scheme paid for medical service at the rate of three pounds per year for each of the first three members of the group. This made a total of nine pounds a year, or the equivalent of about three dollars for a family of three. For the second three members the charge was two pounds each, and for any above that number the rate would be one pound per year. It was not long before there were 450 subscribers to this health insurance plan.

The doctor arranged to be present in the village during each of the two days of the week when the nurse conducted her regular clinic. Members of the plan could have free treatment on these days, and they were entitled to vaccinations and inoculations. The long-standing problem of how to deal with the curative side of the health program was solved. It had been transferred to the people themselves.

In the case of an emergency outside of the doctor's scheduled visits, an extra fee was charged, but it was considerably lower than the usual price for a call. It was now in the interest of the doctor to keep the people well. To this end he helped the nurse conduct classes for mothers, examined the school children, and supervised the public health of the village.

We have been led rather far from the subject of amateur plays, boys clubs, and athletics. But it has been shown how recreation and various leisure-time activities can meet long-felt needs and greatly enrich a rural program. Moreover, once the interest of the community in cooperative activities is aroused, it can be channeled into a wide variety of projects for village improvement.

[CHAPTER V]

Attack the Problem of Illiteracy

[ERITREA]

RURAL reconstruction, if it is to fulfill its real mission, must include an all-out attack on illiteracy. In many parts of the world the shadow of illiteracy still hangs over a large majority of the population. Most countries in the East, it is true, have made a start by providing educational facilities of a kind for their younger citizens, but the adults are frequently left to their fate. Here and there some steps are being taken to teach older people too. As against that, there are still many areas where little has been done to bring literacy within reach of the masses, including the younger generation.

It must not be thought that it is necessary to withhold instruction in agriculture, home improvement, child care, public health, and other essentials of rural development until the entire population can read and write. People who have been for generations illiterate can profit tremendously from such assistance in spite of their handicap. Very often their lack of education in the conventional sense is compensated by retentive memories and a high degree of natural wisdom. They are quick to respond to instruction of a practical nature and capable of putting to good use the knowledge gained.

Today a degree of literacy is the right of every man and woman, and any comprehensive program of rural improvement must therefore as early as possible include suitable measures to eliminate the handicap of illiteracy. Just as agricultural improvements are of little effect if the peasants die of malaria or, conversely, just as public

health projects are in the long run hard to maintain without an improved economy to support such services, so too a serious gap is left in the development of a people if they are permitted indefinitely to remain entirely unlettered.

In 1944 one of my numerous journeys to different parts of the world took me to Eritrea. There, in that strip of land by the Red Sea, among a people who had long been neglected, I found a great experiment in progress. Under the leadership of a capable, enthusiastic Briton a program of education was being speedily whipped into shape by methods that were both unique and effective. It was not merely a project to give illiterate adults a degree of literacy or to organize a few schools for neglected children. It was a long-range, country-wide attack on the problem of illiteracy by providing, without loss of time, educational facilities where none had before existed and where the tools traditionally considered essential for the task were completely lacking.

I talked with the officer chiefly responsible for this unusual development, and I visited several of his schools. As a result I became convinced that from this experiment valuable lessons could be taught to others as well. I made a point of keeping in touch with the expanding program until, late in 1947, the British officer in charge, who had become my friend, reluctantly left Eritrea for a position of larger responsibility elsewhere. For the benefit of those who may be facing a similar challenge, I shall in the following pages give a brief description of the evolution of the project and of the procedures which were used to such good effect among an almost totally illiterate people.

Eritrea is a small country of about 50,000 square miles lying along the western side of the Red Sea. It borders the southern half of this water and consists of sandy, scrub-covered plains and fairly high mountains. Its climate is varied, the rainfall ranging from practically nothing to as much as thirty inches. Asmara, the capital, high up in the mountains, enjoys a pleasant climate; along the narrow coastline the heat is excessive throughout most of the year. Vegetation and farming vary with the changing elevations. On the plains and along the foothills the nomadic shepherds keep flocks

of cattle, sheep, camels, and goats. Native farmers grow potatoes and beans as well as such grains as taff, durra, barley, and maize. On the plateau Italian farmers grow coffee, tobacco, and a little cotton.

The standard of living among the Eritreans is exceedingly low, and little has been done in the past to try to raise it. For hundreds of years Eritrea led a relatively undisturbed existence until near the close of the last century, when the Italians gained control over it. At about the same time the Italians also attempted to subjugate adjoining Ethiopia, but in this they were frustrated. Thus Ethiopia remained independent until 1935, when Mussolini attacked with modern weapons and gained a short-lived victory. In the Second World War, after the British army had driven the Italians out, Ethiopia was restored to its emperor, Haile Selassie, and Eritrea was placed under British military administration. Recently the United Nations ruled that Eritrea be federated with Ethiopia.

For Italy, Eritrea had been chiefly a place in which to settle Italian colonists and so ease the pressure on the homeland of a growing population. The Eritreans had been left to shift for themselves; nor was very much done for the new settlers until the rise of Mussolini with his dream of a world empire. Then schools were established for the settlers, and eventually about twenty-five such schools were in operation. For the Eritreans only six Government schools were maintained throughout the entire country. The language of instruction was Italian, and almost no attention was paid to the several native tongues. Just how poor these limited educational facilities must have been is indicated by the fact that the records at one of these schools show only one inspection in five years. Another institution had precisely one textbook for all of its pupils. In 1939 even these few struggling centers of learning were closed. There had also been a number of mission schools of various denominations, but these, with but one exception, had all been forced to stop their activities as early as 1932 under pressure of fascism.

Such was the situation on the educational front when the British Military Administration took over in 1941. Under international law a temporary occupying power is required to operate a country on

a basis of maintenance only, protecting, so to speak, the status quo. Possibly the British were at first unaware of the fact that there were no native schools to maintain in Eritrea—a country which had been administered for five long decades by a European power might be expected to have an educational system. At any rate in August, 1942, a department of education was added to the various divisions of the Military Administration with Major H. F. Kynaston-Snell, a trained and experienced schoolman, in charge. The major remained at his post for slightly more than five years, and in that time he launched thousands of young Eritreans on the road to literacy.

In those first August days of 1942, Major Kynaston-Snell found himself faced with the task of establishing an effective educational program where none had existed before. After taking stock of the situation, he decided, as a first step, to reopen the schools for the Italians, most of whom had been allowed to remain in the country. That action would, in fact, fulfill the obligations of the Administration; and it was not a difficult goal to achieve. To do only this, however, would mean that the native population remained in the same illiterate state that had been its fate for unnumbered generations. The major could not accept such a course, in spite of the fact that the budget for his department was allocated on the basis of a "maintenance" policy only.

He was determined that a start should be made in providing the native Eritreans with a system of education long overdue. Yet even if his limited budget could somehow be augmented with local subscriptions, voluntary contributions, and funds from various other sources, there were still many other hurdles to overcome. First and foremost was the total lack of native instructors, since in the past there had been so few opportunities to secure even the rudiments of an education, let alone any training for teaching. There were no textbooks, and there was the question of what language to use. The population spoke several different tongues, a further complication in an already difficult situation. The outlook was far from promising and might well have discouraged the hardiest pioneer, but the major held to the old-fashioned dictum that where there's a will there's a way.

Major K-S, as his friends affectionately dubbed him, began making a careful inventory of all the resources, human and material, upon which he might call. It should be possible to find quarters for classrooms in many of the villages scattered over the country. Where there was no building of any kind, there was at least land for a site. Perhaps out of local materials and with volunteer labor modest buildings could be constructed. There were educated young Englishmen in various departments of the Administration, and a few of these might be pressed into service. As for books, the necessary texts would have to be written. In the meantime schoolmasters could teach without books.

These schoolmasters had first to be found. K-S looked over old records, talked with Eritreans, and literally combed the country to see if there might not be, here and there, individuals who were interested in teaching and who had sufficient knowledge of the three R's to be quickly trained for the work. In prewar Italian days there had been, after all, a few Government schools, and these had been attended by a small number of Eritreans. Some of them must have persevered until they had acquired a little education. There were also the several mission schools of a still earlier day. With these and other possibilities in mind K-S continued his search, and his efforts were rewarded.

By the end of the year he had rounded up nineteen "potential" teachers. In most cases their educational background was admittedly limited. The few Eritrean schools permitted by the Italians had covered only four years of elementary education. About 1938 one school had been allowed to include an "experimental" fifth year. Eight of the major's candidates, although entirely untrained, had had a little experience in teaching, and he even discovered one Eritrean capable of serving as his native assistant. This was Isahac Twoldemedhen, who had completed the much more thorough courses, many years before, of the Swedish mission school. He had gone on to Beirut, where he had studied for two years at the American University, and after that he had taught for a number of years until the Italians closed the missions. Mr. Twoldemedhen was an able man, interested in serving his country where he could do the

most good. His appointment was a well-chosen addition to the slowly, or perhaps I should say rapidly, growing education department.

With his motley group finally assembled, K-S organized, in January of 1943, two weeks of intensive instruction for his potential teachers. It was largely a matter of refreshing and increasing their knowledge of the basic subjects of reading, writing, arithmetic, geography, and a little history. Several periods were also devoted to the subject of conducting a school and of how one should go about teaching young children. Such was the limited preparation of these pioneers as they departed for their several schools. In the villages to which they were assigned arrangements for the necessary classroom space had been made. In a few places old buildings had been renovated; in other centers there was an available room in a peasant's home. In one village a cowshed had undergone the necessary transformation. As yet there had been no time to construct new buildings.

With a few helpful visits from the major and his native assistant the teachers carried on as best they could. It was a new experience for most of these people, but their young charges, who had never been to school before, were not critical, and a schoolmaster anywhere in the East enjoys considerable prestige among grownups. Few besides themselves realized how inadequate their training really was. And teaching is one of the most effective means of learning, especially when the instructor wants to succeed.

By the end of the first term and the arrival of summer vacation, a somewhat experienced and certainly greatly improved group of schoolmasters returned to Asmara. In August they underwent another three-week period of instruction. It was an intensive course, as before, but it was much more effective. The manner in which they could now absorb useful information was astounding. From their own experience they knew their weaknesses and their needs. The program was carefully organized to provide basic training in the fundamental subjects and the major essentials involved in imparting knowledge to youngsters. To supplement the theory of good teaching demonstration lessons were given by an instructor from one of

the reopened mission schools. There was practice teaching, as well as singing, games, and gardening. The program of instruction was broadening out, and the curriculum in the little country schools soon showed the effects.

The group was joined in that first summer session by several additional candidates discovered during the preceding months as the major and his assistant traveled about the country. These were promptly put to work at the beginning of the fall term. Others were found after the short course in August and with a few verbal instructions and some preparation on their own were sent out to open still other schools in villages that had been pleading for attention. The nineteen units which had been established in the first month of operation in January, 1943, had grown by December of that year to twenty-eight schools with fifty-eight instructors, and the enrollment totaled over twenty-four hundred pupils. This was in addition to the Italian institutions which were reopened during the first year but which do not concern us in our story of native development.

In a country which has never had a systematic program of education for the indigenous population, the problem of suitable textbooks is always a difficult matter. In the present case the problem was complicated by the fact that there were almost a dozen different languages spoken in Eritrea. While the aim was no longer to impose a foreign language on the country but rather to foster the native tongues, it appeared impossible to give instruction in all these different languages which would, in turn, mean preparing texts for each one. After much discussion it was decided to concentrate, in the beginning at least, on two of the predominating languages, Arabic for the Moslem areas and Tigrinya for the Coptic Christians of the uplands. In two or three sections where these religions are mixed, both would be used. Somewhat later in the development of the program a third was added in one area. This was Kunama, which was spoken in a large region of the western lowlands inhabited by a pagan tribe.

In those areas where Arabic was used the task of providing textbooks was less difficult. Books and reference materials could be drawn from surrounding territories where Arabic was widely spoken,

as in Egypt and the Sudan. With certain adaptations to meet local needs such literature proved to be of great help. In the case of Tigrinya it was necessary to start from the beginning and to spell out in European characters the spoken words. Foreseeing the need for textbooks in his educational program, the major began as early as the fall of 1942, while he was assembling his initial group of teachers, to prepare the first text. During these busy months he found time to have a simple reader prepared under his supervision by one of the better-educated Eritreans. A reader was a logical beginning, since it could be made to include a variety of information. The work of preparing textbooks never stopped; it continued with ever-increasing emphasis as more experience was gained, the staff expanded, and more time was set aside for this important activity. The first reader was followed by others of similar but more advanced nature. In rapid succession texts were written on hygiene, geography, arithmetic, and history, as well as an illustrated booklet for teaching the alphabet. Eventually a pamphlet was brought out on methods of teaching; it will be described in more detail later.

In this country that had so long been deprived of the facilities of education, there was now a tremendous and growing demand for schools. One might have thought that people so accustomed to the lack of education would hardly appreciate the need for it, but this was not in general the case. The most isolated communities demanded attention. Even the nomads had to be supplied with two mobile units to follow them from place to place with the changing seasons.

Much credit for this enlightened point of view must go to the religious leaders of the country. The mullahs had frequently assembled the young of their faith to read the Koran to them in Arabic, and the priests of the Coptic Church likewise had attempted to teach groups of boys the alphabet in order that they might spell out passages from the Bible. Unfortunately this was in Ge'ez, the dead, ritualistic language of the Church. If one were to accept as a test of literacy a knowledge of one of these alphabets, Eritrea might be classified as fairly literate in certain sections and not so completely unlettered as I have implied. It is possible that these rudi-

ments of learning kept alive during centuries of neglect the people's desire for more knowledge.

This desire showed itself in the willingness of poor villages to cooperate in every way possible to insure the establishing of a school. Such cooperation was highly important, as the budget of the Military Administration for its department of education continued to be pitifully small. At first a variety of miscellaneous quarters were used for classrooms. As time went on, modest buildings were constructed for this special purpose. By 1946 twenty of the fifty-four schools then in operation were housed in new buildings erected by the villagers themselves.

Each new center had a village committee, made up of four or five of the head men; this committee was to see to it that the school was a success and that the local community did its proper share in providing and maintaining the school quarters, in arranging living accommodations for the teachers, and in keeping up the attendance.

There was still plenty for the Department of Education to do, not only in providing instructors but in making available the necessary educational supplies and teacher's materials. With such limited funds available, improvisation became the order of the day. Exercise books were made of strips of paper left over from the printing of Asmara newssheets, their covers were made out of old Italian file jackets; the reverse side of old telegraph forms was used for writing paper, and so on.

As time went by the curriculum expanded. Starting with the teaching of the three R's, the program was rapidly enlarged to reflect various aspects of village life as found in rural Eritrea. K-S was most anxious to avoid the mistakes he had observed in so many African schools—the error, in fact, of producing little pseudo scholars with no knowledge of, or interest in, their own environment. How many times had education defeated its own aims by turning out a product which could not cope with its own daily needs. With this in mind the children were taught gardening, elementary agriculture, crafts of one kind or another.

Soon the girls began to enroll, too, and sewing, weaving, mending, cooking, and embroidery were added for their benefit. In the

workshops pupils made articles that were needed by other sections of the school. The boys constructed looms used by the girls to weave cloth, out of which suits and dresses were made for the poorly clad youngsters. As a matter of fact the boys liked to weave too, and so this practical art was included in their training. The children enjoyed modeling various objects in clay, and several of the schools put this interest to practical use. They made clay tiles for the floors of their new quarters. Out of local materials chalk, inkwells, rulers, stools, picture frames, and equipment for games were made. At one school where blacksmithing was emphasized the pupils made plowshares, knives, chains, and spears. They took turns operating the forges set up in the yard. Always, as has already been mentioned, there was some form of gardening. Occasionally the traditionally contemptuous attitude toward manual labor on the part of those who misconstrue the meaning of education reared its ugly head. But the interest of the pupils in the practical arts and the importance attached to such activities by the British leaders kept the program on the right lines.

The training of the teachers meanwhile continued apace. The initial two-week course was extended to three and then four weeks as the embryonic schoolmasters spent additional time in collecting and assembling essential materials. When they returned to their schools, they were loaded down with maps and charts and supplies of all kinds, as well as notes of the studies they had pursued. The summer institute became a cherished institution. The teachers looked forward to these gatherings after a year in a village. It was a social as well as an educational reunion. After the first year the course was always terminated with an exhibit of the pupils' efforts during the previous term; their notebooks, charts, clay models, garden produce, and anything else they might have made were displayed. In the beginning these exhibits were simple affairs, but gradually they assumed larger proportions. They were attended by hundreds of people including high officials who delivered flowery speeches and complimented the workers.

As the program expanded, it became impractical to depend solely on these summer sessions for the training of teachers. When the

initial demand for schools had been met, it was possible to select likely candidates and train them for several months previous to their assignment. Under this plan the Christians were trained at Asmara, where they used the English Institute as their center. There they enjoyed the advantage of special tutoring by the educational director and his staff, as well as assistance from other experienced teachers in the Asmara schools. At the institute they also had an opportunity to learn English, something which all of the teachers were anxious to do, since a knowledge of English gave them access to a much wider range of educational literature. The Moslems were trained at the Keren school by the headmaster who made this work one of his major activities. During the spring of 1945 twelve Christian and eight Moslem student teachers were undergoing training and were available for the opening of new schools in the fall. Such preparation was supplemented, of course, by enrollment in the short summer course. In October, 1946, a teachers training college was established with an initial enrollment of fifteen scholars.

The development of an effective corps of instructors was not limited to these initial measures. Training continued in the field, and all supervisory visits were made highly instructional. The major or his native assistant, when visiting a school, not only helped the master with his current problems but frequently put on demonstration lessons in order to emphasize sound teaching methods and the importance of practical skills. They aimed to make the rounds at least once every three months, which was little enough. By 1946, however, it required two thousand miles of travel to make one complete circuit of all the schools.

With the steady growth of the department, two native inspectors were added to the supervisory staff. Moreover, several young British officers stationed in the various provinces under the Military Administration were pressed into service to teach English in evening classes which had been organized in response to popular demand. These young men were capable, well educated, and glad to be of assistance. No person was immune from the draft if he had the necessary qualifications and a willingness to serve, for the major overlooked few opportunities to strengthen his program.

Early in 1946 the major brought out a *Manual for Eritrean Teachers*. It was written in three languages—Arabic, Tigrinya, and English—and included sixty practical "hints to teachers" under fourteen different headings. This treatise, which was only a small pamphlet even though it was in three languages, covered most of the major procedures and effective teaching devices which are expounded in the voluminous texts and reference books of our pedagogical authorities. As many others have discovered, the major found that when all of the extraneous material is eliminated the principles and methods of good teaching can be boiled down to a few simple statements which can be quickly read and easily understood. When these rules are applied in the classroom by eager young teachers, good results are immediately apparent. The manual dealt with preparing a lesson; use of the blackboard, pictures, and maps; care of books; how to maintain discipline in a friendly and dignified manner; how to develop and hold interest; a few don'ts; and finally concrete suggestions pertaining to several of the subjects which were being taught. I hope that K-S holds no copyrights on this little publication. It has been plagiarized and used in areas facing similar problems far from Eritrea.

The education of girls received attention almost from the start. In many sections of Eritrea, even among Moslems, the villagers are not as conservative or fanatical in their attitude toward women as is frequently the case in other Eastern lands. Early in the development of the educational program girls began attending some classes along with the boys. In a short time several of the schools organized special classes for the girls in deference to normal Moslem procedure. In 1944 a school for Christian girls was organized in Asmara. It grew rapidly, and by the second year the enrollment totaled over two hundred. Also in 1944 a second school for girls was established in one of the provinces, and a third was opened in 1947. Both of these were for Moslems. With the gradual increase in the attendance of girls, young women began to show an interest in taking up the profession of teaching, and some suitable candidates were soon found. By 1945 there were ten women teachers on the staff. The record of 1946 showed twelve, and by 1947 there were fourteen

women engaged in this work as well as several others in training.

By the end of the spring term of 1946 the brightest of the first group of children had completed four grades. The major's plan of organization called for an elementary program of four years followed by an intermediate course of another four grades. It was time now to consider this next step in the development of the program, and in the fall of 1946 the first of these intermediary courses was opened. As in the elementary grades, the curriculum at the more advanced level continued to stress practical studies in agriculture, in the arts and crafts, and in homemaking, which had vocational value for the youth of Eritrea. The department successfully resisted pressure from certain quarters to adopt a purely academic course leading directly to college and university studies.

The story of this unique development in education has to do chiefly with children. Since there had been in the past an almost complete absence of the simplest facilities of this kind, the major felt that his first responsibility was to the young, though he was not unmindful of the widespread need among adults, many of whom had a great yearning at least to be able to read. When his system of elementary education was well under way, K-S began to consider more closely the needs of the older generation in the villages. A few of the teachers with a personal interest in the problem were encouraged to conduct special classes in reading and writing for the men in their districts. The success of these scattered experiments indicated clearly that any effort in this direction would be well received and that there was both a great opportunity and a great need for such an endeavor.

The demand for some form of adult education was not restricted to rural areas. The people in the towns had a tremendous desire to learn to speak English, and since the British Council did not operate in Eritrea, K-S himself opened an English institute in Asmara in the latter part of 1943. In less than two years the enrollment grew to nearly five hundred. The members were Italians as well as Eritreans. Not only did the institute offer courses in the English language, but it also functioned as a social and educational center for the adult citizens of the community. There were lectures, debates, and

concerts. A good library of over six hundred volumes was built up and, as I have already mentioned, the Asmara Institute was eventually used in connection with the training of prospective teachers. This project soon aroused the envy of other places in the country, and before long there were eight of these centers operating in the larger towns of Eritrea, several in rather remote spots.

On the eve of his departure from Eritrea, Director Kynaston-Snell wrote me a letter in which he included a brief statement on the results achieved by his program. From his last report, from his letter, and by the simple process of reading between the lines, I gained a fairly clear idea of what the major was thinking. He could not help but have a feeling of pride, combined with sincere regret at leaving.

K-S recalled the steady day by day growth of the education department during its brief life of five years. The latest figures, which he gave me, indicated sixty-four schools, one hundred seventy-three teachers with thirty in training, and an enrollment of over five thousand Eritrean pupils. He referred to the children who were moving rapidly ahead into the intermediate grades, the many girls now enrolled, the new training college for teachers, and recalled, with special pride, the leadership which had emerged from among these long-neglected Eritreans. In this last letter he sent me a brief biographical sketch of one of these leaders.

The young man, whose name was Asfaha, was one of the native inspectors K-S had taken on when the supervision of schools began to demand additional help. Asfaha was one of the few Eritreans who had managed to complete the entire four grades of elementary schooling during the days of the Italian occupation. His teachers had been untrained, unsupervised, and not at all interested in their jobs; there had been only one textbook for the several dozen pupils in the class who had to learn by repeating statements after their teacher. Despite this insufficient schooling Asfaha wanted to become a schoolmaster, but he had to give up the attempt and secure work as a minor clerk in an office.

When the Department of Education of the British Military Administration was organized in 1942, Asfaha was one of the first

to offer himself for training. He absorbed with intense interest the instruction provided in that first teachers' course. He learned as he taught, and he assimilated the ideas that were given him in the supervisory visits by the major and his able Eritrean assistant. He became one of the most successful of the rural schoolmasters. He developed a fine garden, had an excellent shop, promoted handiwork of all kinds, encouraged athletics. In a short time his school was one of the best.

It was unfortunate from one point of view to remove such a man from his community, but with the scarcity of trained leadership it was essential that he should share his exceptional ability with other teachers. Asfaha was therefore made an inspector; his headquarters were in Asmara, but he traveled constantly and widely among the ever-increasing number of schools.

Asfaha utilized this new opportunity to learn English so that he might be able to read more widely on educational subjects, and for that purpose he enrolled at the institute in Asmara. He became active in preparing the new textbooks. As one of his numerous sideline activities he served as librarian at the Teachers Library in Asmara, and he was relentless in his search of the bookshops for any material that might be useful to his associates. It was obvious that Asfaha would go far in his chosen career. This, the major wrote, was the sort of thing which made him exceedingly happy as he departed from Eritrea to take up his new post.

It is unnecessary to summarize the many lessons which are to be learned from such a pioneering venture. But at least it should be said by way of conclusion that the development of Eritrea is one more example of how much can be accomplished with little and in a short space of time. It emphasizes the importance of beginning at the level of the people and of utilizing the materials at hand. Most of all, it proves once more, if proof is needed, that one can improvise creatively and constructively while holding tenaciously to principles which are basic.

[CHAPTER VI]

Operate a Total Program

[MACEDONIA]

UP to this point we have added one by one the essential parts that make up the whole, for a total program of rural improvement, if it is to operate successfully and effectively, cannot be established ready-made. It needs to be constructed piece by piece, and even the order of the several steps involved in the process is an important consideration. But now the point has been reached where we must deal with a project which incorporated all of the elements of rural improvement according to the needs of the particular locality.

During the decade immediately preceding World War II the Near East Foundation conducted a large demonstration in rural Greece covering forty-eight villages in the northernmost province of the country. Designated at the time as the Macedonian Village Extension, the project has since become known as the Macedonian Program, and the reader will recall that we have had occasion to refer to this program before.

The immediate aim of the Macedonian Program was to assist the people to help themselves by strengthening their agricultural economy, raising their standards of home life, and improving their health, and at the same time to make available various forms of recreational and profitable leisure-time activities. The ultimate goal, however, was to induce the Greek Government to adopt for the benefit of its predominantly rural population the methods developed by the Foundation's program in its own services. To this end it was necessary that special emphasis be placed on the training of local leaders

in order to provide Greece with skilled field workers and capable directors for such programs.

There are at least two good reasons for choosing the Macedonian project as an example of a total program in action. In the first place, it was in existence long enough—a little over ten years—to incorporate, in an unhurried and orderly fashion, all the essential features of a fully rounded demonstration, and this in turn made it necessary to deal with the problem of coordination. In the second place, sufficient time has elapsed since the forced liquidation of the Macedonian work in 1940 by the Second World War to make possible an appraisal of its lasting effects.

In 1922 little Greece, already densely populated with nearly five million souls, was suddenly called upon to absorb over a million refugees who had lived for centuries in Asia Minor. This tragic episode is referred to as the Smyrna Disaster. Greece, aided by the League of Nations, did a magnificent job in resettling and then absorbing these thousands of newcomers. Because of their farming background most of them were placed on the land, in particular in the northern province of Macedonia, which afforded the best resettlement potential.

After the precipitate arrival of the refugees on the shores of Greece, the first task was to provide with seeds, tools, and draft animals those who had been classified as farmers. This did not, however, solve the whole problem. The newcomers found themselves facing new conditions of soil, climate, and crop husbandry, as well as a social environment very different from that to which they had been accustomed. On the other hand, many of the native farmers now had to learn to subsist on much smaller plots than formerly, since it had been necessary to divide up the available farm land.

In these trying circumstances Prime Minister Venizelos turned to the Near East Relief for assistance. This American organization was one of the major private philanthropic agencies engaged in relief work during and immediately after World War I, and it had done much to relieve distress among the victims of the Smyrna Disaster. However, this agency was unable, under its charter and with the funds at its disposal, to engage in a project so pre-

dominantly educational as the one envisaged by the Greek Government. On the other hand, an internal reorganization was about to take place according to which the Near East Relief was to be merged into a new organization whose chief responsibility would be rehabilitation work of an educational nature. With this development in view, it was decided to respond to Venizelos' appeal by organizing an exploratory project in Macedonia under the initial sponsorship of the Near East Relief, and shortly thereafter under the Near East Foundation.

Extending over a period of twelve months in 1928 and 1929, the preliminary survey was conducted in the form of a program, but its chief object was an appraisal of the over-all situation. In other words, educational activities of an exploratory nature were undertaken among the youth and adults of several villages in order to become thoroughly acquainted with the problems involved, the services rendered to the community being of secondary importance.

In the late spring of 1929 the experiment drew to an end, and the results were appraised in a series of group meetings which were attended by Greek officials who had cooperated in the undertaking or followed its activities closely. These discussions did not bring forth many concrete recommendations as to the form which a full-scale program—if one were to be organized—should take. But there was one point on which all participants were agreed; namely, that there was an almost unlimited field of opportunity for the development of a rural reconstruction project in Macedonia if it could be organized along the right lines. Having appraised as accurately as possible the results of this preliminary venture, the temporary organization with its part-time employees was dissolved. In the autumn of the same year a permanent organization was set up and a long-range program launched.

The framework for the construction of a balanced demonstration was based on principles set forth by the internationally known educator, Dr. Thomas Jesse Jones,* in his *Four Essentials of Education.*

* The late Dr. Thomas Jesse Jones was Director of the Phelps Stokes Fund and a member of the Board of Directors of the Near East Foundation and Chairman of its Program Committee until shortly before his death in January, 1950.

In this essay Dr. Jones asserts that all education should be built around four aspects or "essentials" of individual and community life—the economy, the home, health, and recreation. This basic concept has been the forerunner of a new approach to community development which is referred to sometimes as "mass education" or as the "comprehensive approach." Whatever the merits of the various terminologies, Dr. Jones's Four Essentials provided the very design that was needed for a demonstration in community improvement in rural Macedonia.

The exploratory activities had revealed that the problem most urgently needing attention was one of economy—to better the economic situation of the Macedonian peasant faced with the stark necessity of gaining a livelihood from his small plot of land. The preliminary work had also shown that the other three essentials would have to be added by slow degrees as experience was gained and confidence won.

The program envisaged was a type of extension service, but of a much more intensive kind than is commonly found in the States. There were several reasons for this: the concentration of the rural population in villages large and small rather than on scattered farmsteads, the proximity of these settlements to one another, and the poor condition of roads. Besides, these settlements were linked into closely knit communities, and frequently the population of a small group of villages equaled that of a whole county in sections of America.

It was also apparent that if the young were to be introduced to better farming methods, they would have to be trained in the villages where they lived, not in organized agricultural schools which frequently have little resemblance to the villagers' own native environment. One other point considered of great importance was that the leader of the program would have to be accepted by the local people as one of themselves if his work was to prove effective.

Stated in simple terms, the over-all situation required combining the American extension system with vocational instruction and then modifying this combination to meet the needs of rural Greece.

These are a few of the general considerations that went into the

early planning of the Macedonian project. After it was decided that agricultural improvement was to be the first activity undertaken, a young man with successful experience in teaching vocational agriculture to the youth and in conducting extension work among adults was sent out from the States to head this division. At the same time, in anticipation of the day when the American might be replaced by a native of the country, a Greek was sent to Cornell University for one year of specialization in rural education and extension.

Normally such study abroad was not arranged until later, when a successful local leader trained on the job could be selected. The organization was committed, however, to make one or two fellowship grants for study in American universities, and in fulfilling its obligation it naturally desired to contribute to the eventual development of the Macedonian undertaking. Nor did it have occasion to regret the decision. After his year of training Basil Moussouros, the young man selected for the fellowship grant, returned from Cornell to play an increasingly important role in the evolution of the Macedonian venture.

At first the most difficult problem was to secure qualified field workers. Graduates from the College of Agriculture could not be counted upon, since at that time a young Greek with a university education did not ordinarily work on the land, and it was unlikely that he would deal with peasants on a common level. This meant that the demonstration had to fall back on the primary and secondary agricultural schools for its recruits, the majority of whom did not have much knowledge, either practical or theoretical. However, by careful screening, ruthless firing, and intensive training on the job a corps of good leaders was eventually developed. In later years college-trained men did join the staff in increasing numbers, and eventually only those with such training were engaged. But no worker who made good on the job was ever dropped because of the lack of formal education.

In the beginning each agricultural field worker was assigned nine villages, but this proved to be too large an area for the thorough, conscientious worker, and after a few months the number was reduced to six. Soon the demonstration had eight of these six-village

units, making a total of forty-eight villages included in the program.

The workers lived in their respective districts—a revolutionary practice and one of the important factors contributing to the ultimate success of the program. One village, usually the most centrally located, was selected as the headquarters and home of the leader. From here he traveled on foot or by horseback to the other five places. Soon it became common practice to spend one day in each of the villages, thus making a complete round every week.

The most efficient and energetic of the workers had heavy schedules. There were farmers to be seen in their fields, evening meetings with groups of peasants at the coffee house or in the public square, a lesson in elementary agriculture or natural science at the local school, a get-together in the late afternoon with a group of out-of-school youths. It was not long before many of the men found it difficult after a long day's work to walk or ride a horse over the dark trails back to their own homes. Consequently extra quarters for such emergencies were rented in one or two outlying villages, and special allowances were provided to cover this additional expense.

Starting with whatever assistance was most needed, such as treating a sick animal, fighting a crop pest, or grafting wild trees with edible fruit, a program gradually moved into long-range improvements. At this point in the development it was found that local committees of peasants could participate in the planning as well as the execution of the program, and achievements were thereby speeded up. Moreover, once a particular practice had been accepted on a single farm, it was not long before every peasant in the neighborhood adopted it too. Where large numbers of people live concentrated in a small area and all are struggling hard for a bare subsistence, new ideas spread quickly—provided they are sound and can be applied easily.

At first it appeared that concrete results in the way of higher production and increased income could never be achieved on such small plots of land and with resources so limited. The average holding was only one or two acres of good land, devoted to marketable cash crops such as cotton or tobacco; eight or ten acres was the maximum for general farming, including the growing of grain. But

eventually results were achieved by the corps of efficient workers gathered together by the director. The peasants applied their own corrective measures to those who wasted their time—they soon left the theorists to talk to themselves. As an effective means of improving the efficiency of the staff, a policy of intensive on-the-job training was adopted. During the first two years this included, along with other instruction, periodic participation in the everyday tasks of a farm. In fact, such participation was strictly enforced, and it proved to be useful in two different ways. It was of great value to those workers who sincerely desired to improve their own farming techniques, and it induced certain others to remove themselves from the program.

Thus the field workers grew more and more experienced and could be assigned tasks of greater responsibility. By 1934 Basil Moussouros, who had returned from Cornell several years previously to assist the American supervisor, was ready to assume direction of the agricultural section of the program. Building on the firm foundations laid down by his two American predecessors, he carried the work forward with a rare combination of practical experience, American training, and clear thinking. In 1937 the Greek Government recalled Moussouros from his assignment with the Near East Foundation to head the Division of Agricultural Education at the Ministry. In order to retain official connection with the Ministry of Agriculture it was arranged that another civil service employee, Aristides Macris, should be assigned to the Macedonian Program.

Agricultural extension was not, however, the only activity of these pioneer workers. From the first it was understood that poor villages could not afford the luxury of many specialists and that good all-round community workers were needed who were interested in every aspect of rural life. The economy of the people was of such major importance that the basic training of the leaders had to be in agriculture. On the other hand, there was no room for agricultural "experts" who were indifferent or even antagonistic to any assignment outside their special field of interest.

The interests and abilities of the workers naturally varied in large degree. Several were good in promoting games and athletics among

the boys and young men; others were more interested in organizing cleanup campaigns; still others repaired streets or drained swamps. Apart from contributing in modest ways to the general improvement of village conditions, activities of this type had a considerable value in another direction. They brought to light the many possibilities for a greatly expanded program and suggested appropriate lines of procedure.

One of the first needs to become apparent was that for recreation among all age levels, but especially among the younger generation. In the drab environment of Macedonian villages, particularly the newly established refugee settlements, there was little to occupy the leisure time of older boys and young men. When, after a few months, this fact came to be more fully understood, the agricultural leaders were supplied with appropriate athletic and recreational equipment, and the men who found such activity a pleasant diversion put these items to good use.

Soon there was great interest in football, volleyball, and games of all sorts. A number of intervillage contests developed, and it was discovered that some of the fathers and grandfathers followed these events with as much enthusiasm as the youngsters. With the importance of such activities recognized, a department of recreation with broad cultural aims was established twelve months after the start of the program, and Theodore Pays was appointed head of the new department.

Pays was himself a refugee—one of the thousands of Russians who had escaped from the Bolshevik Revolution. Like many of his countrymen, he had fled to Constantinople, where he found employment with the Near East Relief. In 1922, when the organization called for volunteers to shepherd orphan children to Greece, Pays offered his services and thereafter during eight busy years traveled over much of northern Greece on his missions of mercy preparing himself for the greater challenge which lay ahead.

As head of the newly created department of recreation, Theodore Pays was at first content merely to carry on the work of promoting games and athletics which had already started. While thus directing into constructive channels the abundant energies of the young,

however, Theodore was constantly on the watch for other means of enriching village life. Soon he was organizing reading rooms and community centers to counteract, or at least supplement, the local coffee house. The reading room led to the development of a traveling library, carried from village to village by means of donkeys. These active little beasts with a case of books securely fastened to each side of their backs and led by small boys came to be a familiar sight on the trails of northern Greece.

Schools needed playgrounds and appropriate equipment to keep their pupils out of mischief. Pays therefore began equipping play yards, many small and others quite large, at village schools throughout the demonstration area. Moreover, he engaged a music teacher to tour the area, organize village orchestras, and teach eager boys and young men how to play instruments.

In addition to his many other accomplishments Pays was also an enthusiastic camera fan, and he put his hobby to good use. He took scores of pictures of local scenes and people, and a few of these were enlarged and used as appropriate decorations for his reading rooms and community centers. Others were converted into slides and strip films for use in connection with evening entertainments. The people went wild with excitement when they saw familiar places and faces on the screen. These they called their movies, although a real movie was seldom shown. Power for the projections was supplied by an ordinary automobile battery, and wherever Pays went, he carried his battery together with a great deal of other paraphernalia.

By these means the recreational program reached large numbers of people and contributed to better living in many different ways. Pays nevertheless felt that there was a lack of coordination between the various parts of his program, and he also felt that still more needed to be done for the youth of the community. Some centralizing organization for boys between the ages of twelve or thirteen when they left school and eighteen or twenty when they entered the army seemed to be the answer to both these problems. Pays himself had always been active in scouting, first as a boy and later as a scout leader, but the scout movement did not seem to meet

all the needs in this case. He studied the organization of 4-H Clubs and the Future Farmer Movement of America, but neither of these provided precisely the right pattern. Finally, he decided upon a combination of all three movements and called his organization the Future Farmers of Greece. He worked out a constitution and had it approved by Government decree, according to a legal requirement. Local chapters were established in the villages, and the agricultural agents acted as counselors and advisers. Combined, these chapters formed the "national" organization.

Thereafter all of the various recreational and cultural activities which Pays had been promoting were channeled through the Future Farmers Clubs. Soon the new organization became a coordinating factor in the entire demonstration. Much of the community improvement program was carried out by its local groups, and Future Farmers Clubs sponsored projects in conjunction with the sanitation department as well as with the agricultural department. Portions of the weekly meetings were given over to agricultural discussion, and thus the extension leaders had a ready-made opportunity to reach the older boys and young men. With the establishment of the Future Farmers of Greece the recreational department reached its goal of providing the maximum of leisure-time activity for the young coupled with a new unity and a purposefulness which had been lacking before.

Early in 1931 a department of home welfare was added to the Macedonian project. By that time sufficient groundwork had been laid for this step to be taken, but just how the department was to be organized remained a much-discussed question. At first it was taken for granted by almost everyone that such a division should be headed by a nurse. It was the traditional approach. As time went on, the supervisors in the field began to have serious doubts about the wisdom of this practice—at least for Macedonia. They feared that the interests of a nurse would be too restricted and that she would tend to turn toward a doctor for counsel and advice whenever serious problems arose; in addition, with disease so widespread her activities would be more curative than educational. It appeared also that there was danger of conflict with the medical group, in view of the

fairly large numbers of doctors who were attached to the Government Refugee Mission.

Obviously a home betterment program would have to include a certain amount of first aid and even medical help, and assuredly it would pay considerable attention to health education. Above and beyond all of this, however, it must provide instruction on many other things such as food preparation, sewing, home management, child care, and the agricultural work which makes up such a large part of the life of women in rural Greece. The staff engaged for the work must, therefore, be so constituted as to be able to deal constructively in one way or another with most of these matters, and the director of such a varied program should be a person primarily concerned with all-round improvement of the home.

When the problem was viewed from this angle, it appeared that the most suitable person with the necessary qualifications to handle the job would be found in the field of rural extension, and soon thereafter a home demonstration agent connected with the extension service of the State of New York was appointed and sent out to the field.

Martha Parrott, the young woman selected, was a graduate of Cornell University and one of the few women at that time who held a degree in agriculture. Prior to her activities in the extension service she had worked for a time in Greece at an American agricultural school.

On arrival the new supervisor saw at once that the American system of rural home extension would require considerable modification in a country such as Greece. She quickly realized that she would need to utilize the latest principles of rural extension and adult education just as she had done in New York State but that the organizational setup and many of the procedures would have to be specifically designed for the region. In her attempt to find out just what the procedure should be, Martha adopted a course very similar to the exploratory plan that had been followed at the start of the Macedonian demonstration. Using part-time workers to achieve her objective, she proceeded from one short-term project to another until her own education seemed fairly complete. It required all of

twelve months, but by that time Martha had acquired sufficient information to enable her to go forward on safe and sound lines. Simultaneously she had contributed in numerous ways to the improvement of the rural home.

With her thorough knowledge of local conditions, Martha worked out a unique plan based on village homes, slightly improved for purposes of demonstration, which were to serve as centers for a radiating program of home education. At these centers her field staff could have modest but comfortable quarters, and thus they could live at the site of their work. This method of extending home education to distant rural areas was later duplicated, with appropriate adaptations, in several other countries, and the reader will recall the Syrian demonstration in which Josephine Vogt applied her version of a system originally pioneered by Martha Parrott in Greece.

There were a number of considerations which led Martha to evolve her plan of village centers. First she discovered that in the case of home improvement, possibly more than in other branches of the program, the workers would have to be accepted by the village. They would need to know their people well and become thoroughly acquainted with their habits, customs, and manner of life. Moreover, she realized that there would have to be at least two people in a community, since it would not be fitting for a single girl to live and work alone in a Macedonian village. This fact, combined with the multiple interests of an all-round homemaking program, resulted in the use of a team at each center. Finally Martha noted that village women, as well as the men, were eye-minded and needed to see improvement in action before they could be impressed.

As in other departments, a large amount of time was devoted to staff training. The working team, a home economist and a public health nurse, needed to be instructed in every aspect of their work —the preparation of food, sewing, first aid, disease prevention, child care, gardening, beekeeping, poultry keeping, and so on. The nursing member of most of the teams usually had some previous training as a result of a short course established by the Greek Ministry of Health with the assistance of the Rockefeller Foundation. In the

case of the home economists, the supervisor had to be satisfied in the early years of the program with girls who had learned well from their mothers. Martha gave them the rest. All the workers had to be taught how to teach; they had to understand how important home visits were and how to make these visits most effective.

Much of their training consisted in determining what traditional practices of the home could safely be eliminated, what others could be improved, and what new methods could be introduced to better the family's health or ease the mother's burdens. All this took time, and it was several years before measurable progress was made. Eventually, however, some twenty individual practices relating to health, sanitation, diet, and child hygiene were decided upon as the chief points to be stressed, and the business of adding others to the list was a task which seemed never ending. Most important of all, however, was the fact that rural families in all the villages reached by the home demonstration centers began increasingly to adopt these improved practices. The accompanying table illustrates how the village of Megali Vrysi responded to the home economics program in a period of four years.

IMPROVED PRACTICES ADOPTED BY TEN MEGALI VRYSI FAMILIES IN A FOUR-YEAR PERIOD

Improved Practices	*Yearly Record*			
	1933	1934	1935	1936
I. Home Hygiene				
1. House properly cleaned	0	3	10	10
2. House properly aired	0	0	7	10
3. Bedding aired weekly	0	0	8	10
4. Separate sleeping accommodation for children	0	4	8	8
5. Outer clothing removed at night	2	10	10	10
6. Farm animals not in bedrooms	0	7	10	10
7. Baths once a month	4	9	10	10
II. Sanitation				
8. Improved toilet built	0	1	6	6
9. Improved kitchen	0	1	6	10
10. Toilet cleaned regularly	0	1	5	10
11. Water not allowed to stand	0	2	4	10
12. One room screened	0	0	9	8



Albanian farm-school graduates in their commencement attire.



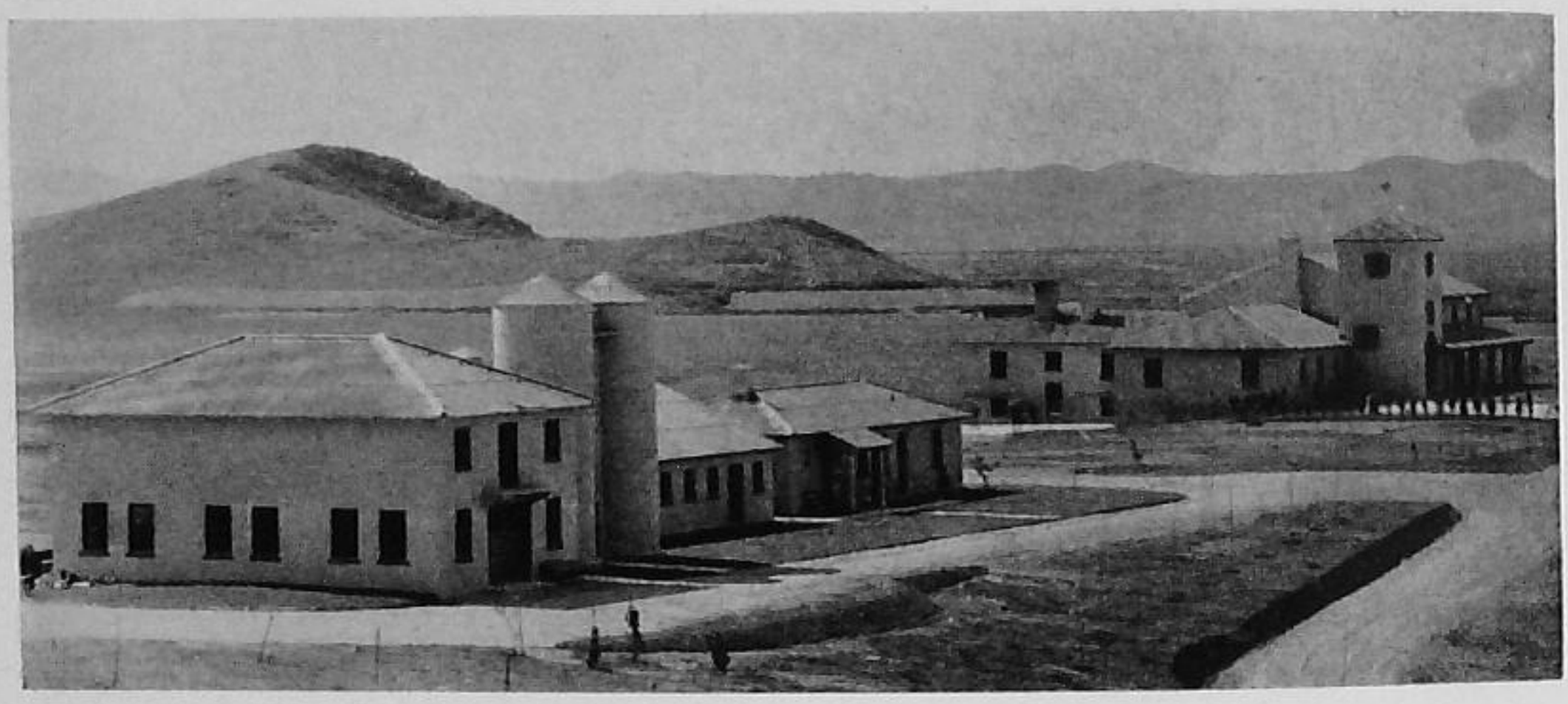
Lunch during a father-and-son day at the Albanian school.



Albanian peasant home.



Double-unit cottage dormitory in style of the peasant homes.



The buildings of the Albanian farm school were modern.



Malaria and the mosquito were explained to representatives of Albanian villages in the control area.

Improved Practices	*Yearly Record*			
	1933	1934	1935	1936
13. Babies under mosquito net	0	0	3	3
14. Screened cupboard	0	0	5	9
15. Home first-aid kit	0	0	9	9
III. Food and Diet				
16. One hot dish daily	0	5	9	10
17. All milk boiled	9	10	10	10
18. Vegetable garden near house	8	9	10	10
19. Home consumption of eggs	10	10	10	10
IV. Child Hygiene				
20. Babies not bound	0	4	7	7
21. Babies nursed regularly	0	0	0	0
22. Babies bathed twice a week	0	1	4	7
23. Children wash teeth daily	0	1	3	5
Totals each year	33	78	163	192
Maximum attainable	230	230	230	230

Obviously not all of the practices—those dealing with babies, for instance—apply to every family.

Every effort was made to keep the program adjusted to the needs of the people. This policy resulted in seasonal variations whereby group meetings, demonstrations, and home visits were gradually reduced as the busy farming season developed, and in place of these activities summer day nurseries were conducted. Before going out to their fields in the early morning, mothers would bring their tots to the center; there the children remained under careful supervision until picked up again at the end of the day. In those areas where the facilities of the center were too restricted to care for all the small children, the local school was made available. These summer nurseries met such a real need that they were not only popular but also generously supported out of the meager resources of the village.

The well-baby clinic was another feature which grew in favor as its value came to be more and more appreciated. Group meetings, home visits, and prenatal instruction gradually induced mothers to bring their new-born babies to the center for a checkup. There the usual procedure of examining, weighing, prescribing suitable foods and feeding schedules, and the like was followed. All the centers had arrangements with local physicians, who came periodically to

make a thorough examination of the infants. Eventually these well-baby clinics instituted annual competitions at each center; there were speeches, and appropriate prizes were given for the healthiest baby, the best-looking child, and so on.

With three sides of the four-square demonstration securely in place, the fourth section had now to be added. In the early days of 1932 the problem of reducing the high incidence of disease and ill-health came to the fore. A short time earlier Apostolos Koskinides had come in to discuss with the American director the possibility of including sanitation in the rapidly developing Macedonian Program, and that possibility was now being tested with Koskinides in charge of the experiment.

From the start of the Macedonian demonstration it had been understood that one department would need to be devoted chiefly to problems of health and that the major factor affecting health and disease in Macedonia, as elsewhere, was elementary sanitation. Even a layman could see this, and Koskinides had had ample opportunity to become aware of it. During his years of travel around the country while engaged in relief work, he had been constantly exposed to malaria because of standing, larva-infected water, to typhoid fever from unprotected drinking water, to dysentery as a result of filthy latrines, or no latrines at all, and millions of flies. At one time or another he had himself suffered attacks from most of these filth-borne diseases.

In his discussion with the director he had called attention to these conditions and had asked for an opportunity to try to correct them. The director saw no harm in letting Koskinides find out what he could or could not do in spite of the fact that he had none of the usual qualifications for the job.

Koskinides adopted a simple procedure. He selected Tourkohori, one of the dirtiest and most unhealthy of the villages in the whole demonstration area, and proceeded to clean it up. No funds had been appropriated for this unscheduled project, but Koskinides drew on whatever resources he could find in the village. The inhabitants, numbering about four hundred fifty refugees and twenty-five natives, were sullen and uncooperative. The refugees had

suffered unusual hardships in getting to their new homeland; the native minority was indignant over the encroachment of the new settlers. The farm plots were small, the harvests had been poor. Nearly everyone was afflicted with malaria.

The two fountains which supplied water from a spring some distance away were in bad condition. The connecting pipes had been damaged; the spring itself was no longer protected, and filth of every sort was seeping in. There was a dirty pool in the center of the village where mosquitoes were breeding, and another depression had been used as a dumping ground for garbage, dead animals, and debris of all kinds. Such were the sanitary conditions of Tourkohori when Apostolos Koskinides took the village in hand.

During the rest of the winter and most of the spring of 1932, Koskinides was seldom to be seen at the demonstration's head offices in Salonica. Toward the end of May he came in with the request that the results of his efforts be inspected. It required only one hurried tour of the community to realize that an impressive transformation had taken place. The swampy spot had been drained, the spring cleaned out and protected, the broken pipe line replaced, the two fountains rebuilt. A new road had been constructed to connect two separate sections of the village, and the surplus material had been used to fill in and cover the dump heap. Many of the inhabitants, inspired by the community effort, had brightened up their own homes. Tourkohori was a neater, cleaner, and healthier place to live in, and the people took pride in the fact that these achievements were the result of their own efforts. Koskinides' main contribution was his leadership, and that was no small contribution.

The project, small as it was, offered abundant proof of the tremendous possibilities inherent in this type of activity. It was plain that the incidence of disease could be drastically cut with but slight expense if the people themselves participated actively in the program. Since Koskinides had accomplished so much with no technical training whatever, there seemed no limit to what he might do with a little formal instruction on the subject. It was therefore decided that he should attend a three-month course in sanitation inaugurated not long before by the Rockefeller Foundation in co-

operation with the new School of Hygiene at Athens. His interest was keen, and he absorbed information so rapidly that he benefited in large measure from those weeks of study. On his return to Macedonia he continued to study, and he frequently sought the advice of those better qualified than he. Small wonder that in the course of a few years Apostolos Koskinides became an authority in Greece on the subject of rural sanitation!

Some of the projects conducted under Koskinides' leadership are described in his own words in a previous chapter. But there were many more—well digging and drainage schemes to protect and increase the water supply in a given area, construction of latrines in farm houses and public schools, and the continuous fight against the scourge of malaria. Each individual project was considered on its merits, and the criterion which determined whether or not it should be undertaken was always the same—could it be successfully accomplished with the labor and resources of the local community? Only if the answer was in the affirmative was the project undertaken.

Gradually the achievements of the sanitation department of the Macedonian demonstration and the methods used by it came to be widely known. About three years after the start of the work, the Ministry of Health asked the Near East Foundation to organize apprenticeship courses for men who had completed the Government course in sanitation. Despite the efforts of the Athens School of Hygiene to give its trainees adequate supervised practice, the sanitation course, now increased to six months, fell short of the desired mark. Many of the graduates did not know how to organize their field work or how to proceed when they got to their jobs. The Ministry decided that their prospective sanitarians should have at least five months of supplementary training in the field before taking up their assignments, and they wanted Koskinides to have charge of the work. Necessary arrangements were made, and the Government agreed to pay all the costs that might be involved. As a further inducement Apostolos Koskinides was granted civil service status, though he continued with the American organization. This was a step toward the ultimate integration of the Macedonian Program into the Greek public services.

By following the sound practice of requiring his Government-assigned trainees to learn by doing, Koskinides had in effect a greatly increased staff. Thus the scheme speeded up the achievements of the sanitation department while providing the finest kind of instruction for the trainees.

With the development of sanitation the Macedonian Program was fairly well rounded out. Certain other features were included from time to time, but these four essentials—agriculture, recreation, home improvement, and sanitation—represented the basic needs for that area. Whatever might be lacking in other respects, illiteracy was not a serious problem in the region. The Greeks believed as strongly in education as they did in religion, and even the new refugee villages constructed first of all a church and then a school. In the early days of the work there were Greeks who knew Turkish but not their own language. In such areas arrangements were made to teach adults how to read and write Greek. Sometimes this was accomplished by the local schoolmaster, who joined the evening meetings of the farmers and devoted an hour or so to the necessary instruction. In all sections of the program there was close cooperation with the village schools. The course of action was not left to chance or to the whims of the individual worker, but was the result of a definite policy in agreement with the Ministry of Education.

As the essential parts of a fully rounded program were being assembled, serious consideration was given to fitting the pieces together. Unless the forces that contribute to a better way of life in a retarded area are focused on the common problem in a coordinated, unified fashion, little progress can be achieved. One service operating independently or in competition with the others may cause the whole program to falter.

There are various means of achieving coordination. Sometimes special departments of rural welfare are created for the purpose, but this method can result merely in the addition of one more competing bureau. In certain British areas the district commissioner, when qualified by suitable training, experience, and personal interests, frequently proves to be the appropriate administrative officer to insure coordination of all the services operating in his area.

The Macedonian Program, since it was an undertaking by a private organization, had to solve the problem in other ways.

It will be recalled that the community leaders in this demonstration were primarily agriculturalists, and they naturally looked to the agricultural supervisor for most of their direction. In every case, from the first American experts to Basil Moussouros, the supervisors of that department were firm believers in the philosophy of the unified, comprehensive program. The chief of the agricultural section always made it his business to keep in close touch with the other department heads so that the direction at the top and the work in the field would be closely correlated. It was the supervisor of the agricultural department, for instance, who first announced to the men in the field that they were to serve as all-round community leaders. Once the policy was made clear, no difficulty was encountered as the sanitation and recreational directors began issuing more specific instructions relative to their respective activities. Frequent staff conferences helped in the work of coordination.

There was one other, though intangible, factor which contributed greatly to unified effort. As the results of the program became noticeable in better homes, in less disease, and in improved living standards generally, the whole staff began to derive tremendous pride and satisfaction from their efforts. This tended to bring them together into a closely knit family group, and they functioned almost as one.

As the years went by, the Greek Government took an increasingly active interest in the results achieved by the Macedonian demonstration, and many of its features were incorporated in the appropriate Government services. As far as the agricultural section was concerned, however, there had always been a feeling on the part of the administration that a program so intensified might be too expensive and require too many trained leaders for nation-wide application. The fear was shared by a number of Government officials. In order to check on the point a number of surveys were conducted to determine the economic effects of this work on the community. It was found that in one season the increased income from improved farm practices which were the direct result of the efforts of the extension service had a value approximating ten times the cost of

operating the program. Moreover, the estimate was conservative, for those in charge of the surveys refused to include in their calculations any improvement that might have been even remotely traceable to other influences.

When the results of these surveys were made known, the question of applying the extension system or appropriate modifications of it on a country-wide basis was carefully considered, and in 1937 the Government passed a law incorporating most of the basic features of the agricultural end of the Macedonian Program into its own services. It was of course understood that it would take years to translate these intentions from the paper design into an actual program. Nevertheless, had it not been for the war the plans would undoubtedly have been carried out.

The recreational side of the four-square demonstration could not be duplicated in the exact form of operation used in rounding out the Macedonian service. However, special features of this section such as the establishment of playgrounds and reading rooms and certain phases of the Future Farmer Clubs were adopted, often with the personal assistance of Pays, by villages and towns all over the country. Rural sanitation soon became an accepted part of the Government service, and Koskinides was increasingly engaged in supplementary training activities for Ministry of Health employees.

It proved more of a problem to integrate the work of the home welfare department in one or another of the Government services. The difficulty arose partly from the fact that it was not certain which Ministry should ultimately assume responsibility for a type of service including, of necessity, both health and domestic science aspects of home and family life.

This roughly was the picture just before the outbreak of World War II. It had not been anticipated that the whole world, including Greece, would shortly be engulfed in more bloodshed. With high hopes for the future, in spite of increasing international tensions, plans were made to revise the demonstration to bring it more in line with the changed situation. It was decided to reduce the size of the area and concentrate more on leadership training as one means of cooperating with the new Government program. The savings ef-

fected by limiting the size of the whole enterprise would be used to finance advanced training for experienced agriculturalists—several from the Macedonian staff—who would shortly be needed to fill key Government positions.

Hardly were the sights lifted for the new set of long-range objectives when destruction took the place of constructive endeavor, and all the carefully laid plans had to be abandoned. Almost ten years were to elapse following the forced liquidation of the demonstration before it became possible even to visit many of the villages. For nearly a decade Greece was the victim of war, enemy occupation, and civil strife. Hundreds of rural settlements were partially or completely destroyed, and thousands of peasants had to flee from their homes. Northern Greece, including most of the villages of the Macedonian demonstration, suffered more severely than other parts of the country. But even a catastrophe of such magnitude and duration did not obliterate the beneficial effects of the Macedonian Program. It is therefore of interest to note what survived notwithstanding these years of disruption.

As this was written, no country-wide system of rural extension had been developed. With the end of hostilities more critical problems occupied the attention of Government officials, foreign missions, and private agencies. However, great strides towards the goal were later made, and with the assistance of the Economic Cooperation Administration a new and improved extension law was enacted by the Greek Government. Greece was moving rapidly ahead in the field of rural improvement. And former staff members of the Macedonian Program were playing a prominent role in the upward trend.

In fact, the lasting effects of the Macedonian demonstration can best be measured in terms of the contribution its Greek workers and supervisors have since made in their various fields of endeavor. One community leader, for example, became a key figure in the artificial insemination program which was conducted by the Foundation for the rehabilitation of the livestock industry in Greece after the war. Another man, who had done excellent all-round community work, received a scholarship from Cornell University enabling him to study there for his master's degree. Arriving in the States several

months before the outbreak of the war, he found it impossible, at the end of the year, to return to his country. Consequently he remained to work for his doctor's degree. Later this experienced leader occupied an important place in the Office of Foreign Agricultural Relations of the United States Department of Agriculture. Still another former member of the field staff became connected with the United Nations Food and Agriculture Organization.

And what of the supervisors who had in such large measure been responsible for the success of the Macedonian Program?

For several years after the end of hostilities Theodore Pays was employed by the British Claims Department appraising war-damaged property. Drawing on the knowledge and skill he had acquired in constructing playgrounds and building community centers, Pays rendered effective service both to the British and to Greek property owners. Later he returned to his earliest field of interest, youth work, and he became the Greek specialist in 4-H Club activities for the extension division of the American Mission to Greece.

Basil Moussouros, at his desk in the Ministry of Agriculture, was forced to mark time during the years of occupation. Patiently and with quiet persistence, against heavy odds, he worked through the years for an adequate system of rural education and extension. More recent developments in Greece clearly indicated that at long last his efforts were to be rewarded. The difficult task of constructing such a service, supported by new legislation, was finally given attention.

Aristides Macris, who succeeded Moussouros to become the last agricultural supervisor in the Macedonian Program, returned in 1940 from a year of graduate study in America just in time to find himself and his homeland engulfed in the war. When peace returned, he took an active part in the reconstruction of his country. Later he was again in the service of the Near East Foundation, protecting the various interests of the organization in the agricultural field and exerting a considerable influence throughout the nation.

During the precarious days of German occupation Apostolos Koskinides did what he could in the Department of Health to protect the countryside from epidemics. After the war Koskinides re-

turned to full-time service with the Near East Foundation and was responsible for the active cooperation of his department with UNRRA. It was on the insistence of an officer of the United States Public Health Service, who observed Apostolos Koskinides in action, that the necessary arrangements were made for him to spend a year in the School of Public Health at the University of North Carolina notwithstanding his lack of a college education. That he made good use of the opportunity is amply shown by the masterly statement on rural health and sanitation problems that forms the major part of a previous chapter in the present book.

Back in Greece, in a dual relationship with the Near East Foundation and the Ministry of Health, Koskinides engaged, through the medium of the ECA, in large-scale operations extending all over the country. Later Koskinides went on a special mission to Iran to share with that Eastern nation his knowledge of rural sanitation.

The fourth section of the Macedonian demonstration also contributed a leader to the nation's small but growing corps of rural experts. Sophia Kyriakou, who as a field worker of the home welfare department pioneered before the war in improving rural homes, more recently was appointed the first specialist in home economics in the newly organized service of the Ministry of Agriculture. Prior to her appointment Miss Kyriakou was given a year of advanced training in the United States. It had previously been decided that a candidate with good experience, maturity, and thorough on-the-job training should be given the chance of advanced training, even though some of the usual academic requirements for such a scholarship were lacking. Sophia Kyriakou, with a formal education equivalent to no more than one or two years of college work but with intensive in-service training and long experience, was selected under this ruling. Sophia returned to Greece in the summer of 1949 with an outstanding record of achievement and a B.S. degree in home economics. With her appointment to a position of responsibility in the Government, another member of the Macedonian group assumed a prominent place in the national organization for rural improvement.

In appraising the long-time effects of the Macedonian Program,

there is one final point to consider. It is necessary to determine what values, if any, remain among the villagers themselves after so long a time and so many upheavals. Late in 1949 it became possible to seek the answer to the question. During a visit to Greece in November of that year, I found that conditions had sufficiently improved to make possible a tour of the prewar demonstration area. I decided to take advantage of the opportunity to visit familiar places and see old village friends who might still be alive. It was interest of this sort rather than any thought of a careful survey that led to the tour, but the facts that came to light were both surprising and encouraging and showed the need for more detailed study.

The party that went out with me included Nikola Micos, an agriculturalist, and Vassiliki Theodoridou, a home economist, both of whom had been connected with the prewar program. Miss Theodoridou had worked for several years in the first village we visited, Ano Kopanos, about fifty miles to the west of Salonica.

Turning off the main road, we drove through the mud to the square in the center of the village and stopped in front of one of the homes. As we climbed from the jeep, a woman came to the door. Immediately she recognized her old friend, the home economist. Taken by surprise and then hardly able to contain herself, she ran forward to embrace Vassiliki. She called to her neighbors. Soon the yard was filled with excited women, some laughing, some weeping, and all embracing their former home leader.

One mother presented her twelve-year-old son and announced that as an infant he had been enrolled in the well-baby clinic. Moreover, he had taken a prize as the healthiest child. Another woman proudly introduced her seventeen-year-old son and reported that he used to attend the day nursery while she worked in the fields. They began to recall the domestic science and hygiene lessons which they had learned from the home demonstration team and how this knowledge had helped them to protect their families and rear the babies that were born during the years of war and occupation.

Gradually a number of men came to find out the cause of the excitement. When they learned the identity of the visitors, one of whom was an agriculturalist connected with the old program, their

welcome too was warm. They recalled with affection and sorrow Demosthenes Economou, their own agricultural leader who had been sent off to Germany and eventually killed. They took us to a two-story partially constructed house which was used by several of the farmers for storing and packing apples. Both floors were filled with large, luscious fruit of an excellent variety. The growing of fruit for marketing had first been introduced by Economou and his local committee; now it had developed into a flourishing industry on which the economy of the village was largely based.

The men listed various other farming practices which their agriculturalist had recommended and which many of them had adopted —planting cotton in rows, fertilizing corn, growing more mulberry trees for the increased production of silk, improved poultry breeding. They pointed out several of the small poultry houses that had been constructed under Economou's supervision. A disease had wiped out most of their flocks only a few years ago, and now there were few laying hens in the village.

The demonstration home was still standing at the head of the square. It showed the effect of years of neglect, but there were still a few shrubs which the leaders had planted in the days when they had a fine garden in the yard. The present occupant still kept the latrine at the back of the house spotlessly clean. We visited a few of the homes and were shown the improvements their owners had added in those better days.

Ano Kopanos had not suffered greatly during the war, but in the civil strife which followed the village had been raided by the "Andartes" and seventeen houses had been blown up or burned. Forty families had fled during the troubles, and not all of them had come back. A member of the home guard showed us his gun and how and where he had kept watch during the long nights.

When we were ready to leave, there was scarcely any place left in the jeep for its passengers. Every corner of the vehicle was filled with beautiful apples, and Vassiliki carried a large bunch of flowers. As the villagers pressed around the car to say goodbye, they hopefully asked when the program would be resumed. We could not, unfortunately, answer their question.

The Macedonian demonstration had included several groups of villages in this region besides the six under Economou's supervision. We had stayed so long in Ano Kopanos, however, that we had time only to drive along the outskirts of some of the other places as we detoured our way back to Salonica.

The next day we journeyed over rough roads to the district of Kilkis, several hours to the northeast of Salonica. Our first stop was in Megali Vrysi. News of our arrival spread quickly, and soon we were surrounded by old friends cordially greeting us. They inquired first about their agricultural leader, who had lived among them six or seven years and who had done much in that time to improve conditions throughout the whole district. We reported that their friend was now working in America and interpreting to that distant land the needs of rural Greece.

The women asked about Sophia Kyriakou, their beloved home economist. We told them of Sophia's brief period of study in America and about her new work for Greece. They were happy when they learned that Sophia would be visiting them again one day and welcomed Vassiliki particularly warmly since she seemed to recall to their minds all the things that Sophia and her teammate had done for them in the past.

It was market day in Kilkis, and many of the villagers had gone there to purchase urgent necessities or dispose of the few commodities they had to sell. It was fortunate for us that not everyone was at home, for we were soon being conducted on a house to house tour to see home improvements dating back to the prewar program. There were medicine cabinets still on the walls though the bottles had long been empty, screened cupboards for protecting food against flies, window screens with the netting badly rusted or entirely gone and small hope of replacement, and little "kitchens" which had been constructed in one corner of a room with special sinks for washing dishes. In several homes we saw the shelf arrangements that the home economists had recommended for neatly storing dishes and cooking utensils when they were not in use. At each stop we had to inspect the latrine as if it were the owner's most valued possession. It was obvious that all of these accessories to

better living had been guarded zealously by the villagers throughout the years of devastation and hardship.

In the course of our tour a man in his early thirties introduced himself as Alexander Papadapolos, former president of the Future Farmers Club of Megali Vrysi. He presented his wife, who as a girl had been enrolled in the classes at the home demonstration center. They had one child, a boy, and the parents told us with considerable pride that they were bringing up their son in accordance with the lessons his mother had learned years before.

Alexander insisted that we visit the little theater and community room which had been constructed by the club boys under the direction of Theodore Pays. Megali Vrysi and the surrounding area had been seriously damaged during and after the war, and the building was in poor condition. Some of the stage fittings, however, were still in place, with the scenery, painted by the club members, now torn and badly discolored. The books of the reading room had been hidden during the occupation and were now kept in the community office. Most of the musical instruments of the club orchestra were intact and still in use.

Alexander pointed out the swamp which the boys had helped drain before converting it into a community garden. In the center of the village was the small park which had been fenced in with a neat stone wall and planted with trees and shrubs; nearby was the reservoir which Koskinides had helped them to construct. We were taken out to one of the hillsides which had been planted with pine seedlings and protected from goats. The whole area was now a forest of high trees. The story was recounted of how during the occupation the Bulgarians decided to cut down these woods for the excellent fuel they contained. When the people learned of this, they immediately marched in a body to Kilkis to plead with the German commander for the protection of their trees. The commander gave his word that the trees would not be molested, and he kept his pledge.

As we moved from place to place the farmers recalled the improved crop and tillage practices which they had adopted on the recommendation of their agriculturalist, the improvement in livestock as a result of the cooperatively owned bulls, and the annual

calf exhibits. We were told that the prefect of Kilkis who had taken such an interest in these developments within his district had been killed during the occupation. The gentle priest of Megali Vrysi who had urged his people from the pulpit to give their full support to the Foundation's community activities had been dragged from the village by the guerrillas and murdered in cold blood. The model poultry house which Father Haritides had constructed in his own yard was still standing. We learned that the village continued their day nursery all through the war and occupation years as one means of safeguarding the health of their children.

This short and hurried tour of only a few places proved beyond question that the lessons taught in years gone by had made a deep impression on the hearts and minds of the people. It is clear that a comprehensive program such as the one in prewar Macedonia can be effective and produce lasting results. People in underdeveloped areas want to learn, they are ambitious to better their living standards, and they are eager to follow if there is someone to lead them.

[CHAPTER VII]

Organize Farm Schools with Caution

[ALBANIA AND CYPRUS]

THE problem we are now to consider must be presented in a manner somewhat different from that followed in previous chapters. The reason for this is simple—the material necessary for the method of presentation formerly used is lacking. Heretofore certain principles have been emphasized by telling the story of a particular piece of work which illustrated the points to be stressed. Careful search, however, over extensive parts of the East has failed to disclose a specific example which might serve our purpose here. It must not be concluded from this that it is impossible to find suitable illustrations of the kind of farm school which could be cited as a model. It does mean, however, that their number is small.

I myself have seen in many parts of the East good institutions devoted partly or entirely to agricultural instruction. I have participated in organizing or directing several schools of the kind. Some of these training centers succeed in instilling in their pupils a new appreciation of the farmer's vocation and a greater respect for manual labor. In certain cases they provide excellent character training.

For the most part, however, these schools tend to provide their pupils with a large amount of information *about* agriculture which is by no means the same as teaching them farming. A few develop proficiency in certain basic skills which are an important part, but not all, of this important occupation. Rare is the agricultural course in underdeveloped sections of the world that prepares rural youth

for the kind of farming they must practice and the mode of life they must follow in later life in order to be successful and happy in their chosen, or inherited, career. Far too often it happens that the supposedly vocational institution weans its students away from the soil or makes unhappy misfits of those who attempt to return to the land.

The reasons for such an unfortunate situation are many and varied. Chief among them is the fact that farming is a way of life as well as a business, or a vocation, and that these two aspects of this age-old occupation are closely interrelated. Just how to interpret that fact suitably in a practical course of agricultural training is a problem not easily solved. But there are certain elements such as the location of the school, the length of the training period, and the living arrangements of the students which have a decisive influence on whether a school succeeds or fails in this respect. The organization of far too many agricultural institutions takes no account whatever of the farmer's mode of life or even his manner of tilling the soil.

There are other considerations too which bear directly on the problem. It frequently happens that the headmaster of a vocational center and possibly one or more of the instructors received their professional training in a Western country—America, England, or France. With that background they embark upon their work of instruction without waiting to reorient themselves or to make a serious study of how the local farmer tills his soil and tends his flocks. Moreover, the textbooks are often of foreign origin or largely based on such sources. This means that the knowledge imparted is quite academic in character and bears little relation to the practical everyday problems which the graduates must face when they attempt to gain a livelihood from their land.

In addition, the size of the school farm is often completely out of proportion to the small-scale plots on which the parents of the students are forced to depend for survival. The implements are apt to be of the latest imported type, partly because of the extensive acreage to be tilled. Thus in a region of family-worked farms which are not only small but broken up into scattered pieces, the school

may often be using machinery that is especially imported, costly, and impractical for general use.

There is also the matter of living arrangements. Few institutions of this kind manage to provide accommodations which, while being sanitary and comfortable, reflect local customs and habits. Too frequently the pupils live and work in surroundings and with accessories which are totally foreign to their normal way of life. They gradually gain the impression that only by borrowing facilities from the West can one maintain a proper living standard. This is far from the truth, for in many respects the East has much to offer the West. The least that should be done is to attempt a living pattern that combines essential elements of the two.

After four or five years in an environment basically Western and under a program of instruction unrelated to local needs and conditions, the graduate is expected to make his own adjustments when he attempts to apply his agricultural training. Is it any wonder that a large percentage of these boys, once they have their diplomas, seek Government jobs or find themselves in an unhappy situation if they do return to the land? This is one of the reasons why those with experience in the field insist that the period of training should be brief and intensive or, alternatively, that the total program of vocational instruction should be extended over several years in the form of a series of short unit courses.

Some American experts in the field of vocational agricultural education have suggested that the problem might easily be solved by applying the same system that has proved successful in the States. Here, where modern machinery is used everywhere and is relatively inexpensive and where land is still fairly plentiful, the vocational agricultural department at the high school seldom owns land and has but a few items of equipment. The boys live at home and go to school every day by car or by bus. Early in the morning and evening, over weekends, holidays, and summer vacations, they assist their parents with the daily and seasonal work as do farm boys all over the world. The instructor coordinates his classroom and laboratory teaching with supervised practice at the home farms of his pupils. In the case of many country boys, completion of the voca-

tional course at the high school does not involve the traditional next step of looking for an opportunity to apply the training they have received. By this time they are already actively and profitably engaged in the vocation for which they prepared. They may be in business on their own or working on a partnership basis with their fathers.

This is a method of preparing future farmers which is direct, relatively inexpensive, and usually quite effective when properly carried out. Unfortunately it seldom applies in those areas which concern us in these pages. The reasons are several. Even in Middle Eastern villages fortunate enough to have schools the instruction does not often extend beyond the elementary grades. The regularly enrolled pupils are usually too young for vocational training. Very few of them go on to a secondary school; if they do, they must live in a town with relatives or friends. Vocational training for these older boys away from home requires a boarding department with a farm and all the other accessories, with the result that the essence of the American system is lost. Thus we are brought back again to the complex problems of a special vocational center.

Generally speaking, the entire question of training for the future farmers in Eastern countries is one which has given rise to a wide divergence of opinion. There are those who insist—and with good reason—that the most effective solution is not a school or vocational training course in the traditional sense, but rather an intensive form of rural extension service in the villages themselves. This system is based on extension workers who are trained on the job and who then organize the older boys and youths into future-farmer groups or modified 4-H Clubs. Through these channels and over a period of years, the younger generation is given right on the spot in its own environment systematic farming instruction of a practical nature. The merits of the system are such that our discussion might well be concluded at this point, for the method is not only relatively inexpensive but is by far the most effective way yet discovered for doing the job.

However, the farm school exists in many areas and has to be reckoned with. As one who has constantly to deal with this chal-

lenging problem I frequently encounter two differing, if not opposing, points of view regarding the role of the farm school in the agricultural situation in underdeveloped rural areas. There are those who feel sure that vocational schools are the answer to the problem of training the young in better farming methods. A few among them can back up their contention with successful experience, but most of the supporters of this viewpoint are wholly unaware of the pitfalls involved.

On the other hand, there are the practical-minded educational officials who have long struggled with the problem and who are continually asking themselves the following question: "What can we do with the schools we already have in order to prevent their turning out a constant stream of new applicants for Government positions? We want more and better farmers, not additional office clerks."

It is safe to conclude from our brief review that the training of young people for the vocation of farming is not the simple process it is sometimes considered, and this is particularly true of the agricultural areas most in need of improvement. Whether we like it or not, farm school instruction seems to be a long-established and generally accepted method of attempting such training. Vocational units of one sort or another, some fairly good and others not so good, will continue to operate, and new centers of training will be opened. Appropriate means must, therefore, be found to make this medium of rural improvement more effective, and there is no better way of doing so than by learning from past mistakes. To that end we shall now turn our attention to a rural training center which was operated jointly by the Near East Foundation and the Albanian Government during the decade before World War II.

The Albanian-American Institute, as the cooperative undertaking was called, included in its program a training unit to prepare young women for village teaching, a practical farm school, a public health department for the institute and the surrounding area, and a limited service of rural extension reaching out into several villages adjacent to the center.

The girls' school was the first of its kind in the country, and it filled a great need. Apart from the usual problems of all pioneer

effort, this part of the demonstration was successful from the start. In the course of a few years the school was incorporated into the educational system of Albania, and the American director was free to turn her attention to the development of a simple homemaking course. The health department directed by an able woman doctor provided medical care and health education for the students of both the farm school and the girls' school. In addition it gave medical attention and instruction in child care and personal hygiene to peasant women from the surrounding countryside. The department of sanitation dealt with a particularly dangerous species of mosquito and drastically reduced the incidence of malaria. Eventually a modest progam of agricultural extension using the students as leaders and operating under the various department heads contributed to the improvement of farm practices in the region.

It is not the purpose of this discussion, however, to dwell on the various excellent features of the institute or even to stress the good points of its agricultural division. Our aim at the moment is merely to show how easy it is to stray from the path of sound vocational training, and the farm school of the prewar Albanian program provides a convenient example.

At that time it seemed that the institute's department of vocational agriculture offered an unusual opportunity to demonstrate to the whole of the Near East as well as to Albania just how such a training center should be operated. The Near East Foundation already had to its credit considerable experience of the kind in other rural areas of the East, and its Board of Directors, myself included, felt sure that they would not make those errors so frequently made by others. The program was therefore launched with an attitude which savored just a little of "holier than thou."

It is of interest to review in objective retrospect what actually happened. When the dust of the first rush of activity had settled sufficiently to take stock of the situation, the Foundation discovered that it had been guilty of many, if not most, of the mistakes so often committed in the name of agricultural education. The setup included an extensive acreage in a country of small holdings. The farm was equipped with some of the latest and most expensive types

of modern machinery. An excellent barn for the livestock and the quarters for the students reflected a standard of living entirely beyond the reach of most Albanian peasants. The course of study required the traditional four years, although in Albania a much shorter period would have served much better.

Clearly, in the process of organizing the school a situation had been created which automatically limited the effectiveness of the teaching. In retracing the all too hurried steps which led to such a state of affairs it becomes obvious why and how this came about. A similar pattern of procedure has no doubt been followed many times elsewhere.

First, there was the fact that the institute very properly was a joint undertaking in which the Government played an important part. To most Albanian officials it seemed only logical that a farm school should have plenty of land for its crops and flocks. With this thought in mind the Ministry of Agriculture saw to it that the concessions granted to the Near East Foundation under their joint agreement included extensive fields, six hundred or more acres in all. No one seemed to have the courage or foresight to point out that a much smaller farm would have considerably greater educational value in a region where the average farm holding was seldom more than ten acres. Moreover, there were those who labored under the mistaken impression that a school farm could largely pay for itself if it had enough land.

The American Foundation contributed its share to the list of mistakes that were made. The executive officers wanted the project to get started without delay. It seemed unnecessary to them to wait months or even years until studies could be made to determine just how the rural people of Albania lived and worked, how their homes were constructed and furnished, how their flocks were sheltered, and how they tilled their small plots. Construction of farm buildings began immediately with a modern dairy barn having facilities for at least twenty head of milking cows. Few farmers in that little country could ever hope to duplicate such a structure, even though it was a fairly modest building by American standards. It was a well-constructed, up-to-date barn, and it created much interest. But

while it did facilitate the teaching of certain dairy techniques which were important in Albania, the graduate young farmer back at home would have to improvise measures for doing those same jobs. Vocationally speaking, these improvisations were just as important as teaching the techniques.

The need for modern farm equipment was a natural outcome of the factors already mentioned. Six hundred acres of land could not be broken up with a wooden stick or even with a steel plow drawn by oxen. Tractors, multiple disks, big harrows, and all sorts of heavy machinery were required. Apart from the extensive acreage there was also another reason for the need of modern machinery. Much of the land assigned to the school had not been cultivated for many years. A number of the fields were covered with scrub growth and had to be cleared and then plowed up for the first time. This required tractor-drawn machines, as well as a few special implements designed for the purpose. The director of the institute was a great advocate of modern machinery, and in the present instance he faced emergency problems which lent support to his arguments. At any rate a large order for the latest in farm implements was finally sanctioned by a somewhat reluctant head office in New York.

In the living quarters of the pupils an attempt was made to reproduce village conditions. Instead of providing one large dormitory, the plan called for several cottage homes to be clustered around the brow of a hill. It was a sensible idea, and the design of the dwelling was typically Albanian. But the materials used for construction, the skilled workmanship, and the many fittings made the houses much too expensive to be widely reproduced.

Thus an educational opportunity was lost and attainment of the basic aims of the school was made more difficult through lack of sufficient knowledge of local conditions—because of the characteristic American trait of wanting to get things done quickly.

Under such typical handicaps as these the Albanian farm school started its work. In record time the most essential buildings were constructed, the land was cleared, crops were started, and the first students were installed. They were a fine group of seventy Albanian country boys, most of them sons of small farmers. They were all

at least fifteen years of age, and all had five grades of elementary education. These first students probably learned considerably more than those who followed them a year or two later, for they helped in the construction of buildings, assisted in clearing the land, laid out the fields, and planted the orchards. So pressing were some of these tasks that classes frequently had to give way to emergency jobs. The situation enforced procedures which should have been normal policy.

During the first few years the administration of the farm school was in the hands of Americans who had been trained in vocational agricultural education but who lacked the necessary foreign experience to make essential adjustments or to stand up and fight vigorously against procedures which they subconsciously felt to be harmful. One might say that they lacked the authority to present their arguments with force since they had not yet learned from bitter experience the vital importance of seemingly minor matters. Yet in spite of these weaknesses some headway was made under their leadership, and as time went on they introduced various changes and improvements that were designed to counteract the mistakes made at the start.

In 1934 the Albanian-American Institute acquired in Ralph H. Allee a director who was a skilled administrator and a capable rural educator with considerable experience in the Near East. Shortly thereafter the administration was further strengthened by the addition to the staff of Merrill Knapp in the capacity of farm manager. This new team began to put the work of the farm school on a sound vocational basis by introducing important changes and modifications into the program while retaining such good features as had been incorporated in it from the beginning.

One of the first steps taken by the new and more experienced regime was the sale of some of the costly farm machinery. Since all the land was now broken up it was possible to dispense with certain machines which had been necessary before. In addition, there were a number of pieces that had never been used. Included also in the sale were several implements that had formerly been thought essential. Despite the large acreage, it was felt that the work could some-

how be done with less expensive equipment. The income derived from the sale helped to finance other needed improvements.

From the first it had been agreed that the living arrangements of the students at the farm school should reflect as closely as possible the social organization of an Albanian village. This had been one reason for the cottage dormitories which, unrepresentative though they were in many respects, provided an excellent basis for later developments. It was now decided to go one step further and organize the residents of each cottage into a family unit. All these family units constituted a settlement not unlike that of an Albanian village. Thus the student body was divided into families, each unit numbering eight or ten boys, which was fairly representative in size of the patriarchal groups of Albania.

Each "family" adopted a name with a symbolic connotation. One group assumed the title of Besa, which in English means Faith. Another elected to call itself Bindja, or Obedience, and there were the families Thrift, Cleanliness, Perseverance, Cooperation, Will Power, and Work. The community formed by these worthily named groups was known as Perparimi, or Progress.

Every Albanian family has its patriarchal head, and the residents of Perparimi followed the practice. One of the older boys, usually a senior, was elected to this post of responsibility. The several "family" heads made up the village council or, in the literal translation from Albania, "the council of old men." Conforming to the local custom still further, the council designated one of its members as chief of the village.

It is not at all difficult to visualize the potential educational possibilities of such an arrangement, and the administrators took full advantage of the organization not only to promote good instruction but to correct the weaknesses inherent in the original program. The village council fulfilled many of the obligations which the officials of any ordinary community must meet—such as responsibility for general sanitation, mosquito and fly control, matters of cleanliness, and, finally, police duties. These latter duties brought the student in contact with many of the disciplinary problems of the school. The members of the committee also helped with preparing the food

and with caring for the sick under the supervision of the school doctor. The village council planned recreational activities and arranged for games to be played in competition among the family groups.

The device of duplicating within the framework of the school the way of life of an Albanian community eventually helped to solve the complex problem of what to do with the outsize school farm. Since no part of the land could very well be returned to the Government, the question was how to make the best use of so large an area without losing sight of the vocational objectives of the program.

In answer to the problem it was decided to divide the large acreage into two parts. One part was designated as the commercial unit and was operated as efficiently as possible with a tractor and other necessary equipment, in the same way that the few well-to-do landlords of Albania were trying to do. The other section was cut up into peasant-sized plots, and one of these was assigned to each "family." Thus the residents of Perparimi went out to their own fields after the manner of farmers all over the East. They worked their plots with inexpensive implements much as any Albanian might do. Each unit was equipped with one yoke of oxen, a plow, a cart, a harrow, and small tools. At one point in the development of the program the director introduced a number of cradles from America which had been stored away in barn lofts of the Midwest following the introduction of the reaper and binder. In Albania these cradles constituted an improvement on the little hand sickles which the peasants used for harvesting grain. On occasion several families would join together and apply for the loan of the tractor from the commercial department, just as members of a cooperative might do when it seemed a wise plan. When they had caught up with their own work, the boys could "hire out" to the commercial farm as their fathers did at home.

It is very probable that, had the war not intervened, this reorganization of the school farm would eventually have proved to be at least a partial solution of the problems created by an excess of acreage.

Under the new leadership another important matter received the attention it deserved. After much deliberation the American director

induced his faculty to agree to a reduction in the length of the training period, and with remarkable diplomacy he also secured the support of the Albanian Ministry for the change. He took the view that one does not aim at perfection in vocational agricultural education but rather at the optimum training for a certain purpose. It is not an easy balance to achieve and requires careful appraisal of the curriculum in order to differentiate between matters that are pertinent to successful farming in a given area and those that are of secondary importance. Certain aspects of the farmer's vocation may be worthy of study but are not of sufficient immediate value to justify the extra training costs or the additional time the student has to spend away from home—an important consideration in underdeveloped rural areas. The course was therefore reduced from four years to three; this was, at any rate, a step in the right direction.

When the program was rearranged for the shorter training period, a further improvement was added. Before receiving their diplomas, the prospective graduates were required to spend six months at home or on a neighboring farm and give evidence of being able to apply their skill. A few of the top-ranking graduates of each department were allowed to remain as student assistants. These posts brought no remuneration, but they represented an excellent way of meeting the extra requirement of practical experience. Those who made good could continue for an additional six months, and for this period they received a nominal wage. From such a group of postgraduates were selected suitable candidates for advanced study abroad and eventual employment on the staff of the school. By this and similar means a capable faculty was built up within a few years.

It is not within the scope of the present chapter to deal with all the various educational processes which are involved in the successful operation of vocational agricultural courses. However, it is appropriate to emphasize the importance of a few of these procedures by referring to the experience of the Albanian school in its efforts to develop effective methods of instruction. Concentrating on their objective of preparing farm boys for farming, the director and his staff made it their policy to bring all formal instruction in line with

the needs of the over-all program. Accordingly classroom discussion and study were based on the same seasonal problems that were occupying the time and attention of the students in their barn and field work. Thus theory and practice were tied closely together, and both contributed jointly toward the goal of the school.

This practical concept led directly to another development—the adoption of the so-called cross-section organization of instruction. Previously the students had concentrated on certain enterprises and subjects each semester, as was done in the early days of vocational agricultural education in America and is still the practice in most college courses. But in every farm enterprise, whether it is raising poultry or producing milk or growing corn, the skills and the knowledge required range from the simple to the complex. Moreover, the students usually participate in one way or another in all the daily and seasonal activities of the school farm, as they would do at home. A farmer does not specialize one year on corn, the next year on poultry, and the third season on dairying. All these enterprises supplement and complement one another and require attention every day of the year. Hence the so-called cross-section organization of instruction which reflects this normal situation.

The program therefore moved from an approach which tended to emphasize specialization and which represented an unnatural division of farm work to a study of all the problems that were of daily concern to the students. Cross-section instruction requires careful planning to maintain continuity and to insure that the first-year students deal with simpler jobs and the more basic information. From this point they move on each year to the more complicated processes until in the final term they are dealing with managerial jobs in the fields and the barns and with problems of decision in the classroom. As a boy's ability increases, his responsibility increases also.

One improvement led directly to another. The Albanian school had been following the common practice of grading students on the basis of their classroom studies and then averaging these marks with those secured in performing farm jobs. It is usually considered that a grade thus secured will reflect fairly accurately a student's

capacity to combine theory with practice. But it was discovered that there is frequently little relation between a boy's ability to absorb book knowledge or express himself clearly and his skill in performing farm jobs or making accurate and intelligent decisions. It therefore sometimes happens that even the average of the two ratings gives little indication of a student's fundamental potentialities as a farmer. Consequently a new practice was adopted by which the pupils were graded entirely on the basis of their proficiency in performing essential farm tasks and, as they progressed in the course, their capacity to handle responsibility and make intelligent decisions. Since the chief purpose of the school was the development of good farmers under conditions as found in rural Albania, it was felt that the students should be judged on the basis of their practical achievements rather than their scholastic attainments.

Furthermore, the gradual evolution of the Albanian farm school was greatly speeded up by the use of a technique which is now standard practice in progressive vocational schools—the job analysis method of agricultural instruction. The introduction of this method of teaching contributed materially to bringing about the various improvements already discussed. Under such a system the topics which commonly make up an agricultural course are replaced by the actual jobs which constitute a farm enterprise. There is a psychological as well as a practical value in teaching—in the classroom as well as in the field—the job of "fertilizing the corn crop" instead of dealing with the topic of "fertilization" or even "the fertilization of corn." The first implies action even though the student may find that he has to learn a certain amount of chemistry and physics in order to know how to fertilize corn properly. Whatever ramifications the instruction may include when dealing with the science of a subject or related information, both student and teacher never lose sight of the relationship of their study to the job from which it stems.

In discussing the problem with his Albanian staff, Dr. Allee neatly summarized volumes of pedagogical material in the following words:

It must be admitted that an inspired teacher can make topic discussion quite fascinating. Such a teacher might follow the history of the corn

plant from South Mexico all over the American continent, sail with it across the Atlantic, and end up with the soggy cornbread which is the staple food of the Albanian villager. He could refer to it as *Zea mays* and give a personal touch by diagraming it as a part of a sophisticated family. However, the ordinary teacher puts his class to sleep through such discussion, and even a good teacher ends up with his students no better able to plow, plant, cultivate, and harvest corn than they were before.

This simple technique which has contributed to the improvement of vocational instruction in America has been found to be of even greater value in the underdeveloped areas of the East. It is an effective means of assisting those teachers who tend to be academic in their thinking and teaching to develop a more practical approach. There are numerous texts which deal comprehensively with the subject and which will give the reader a better understanding of the procedures involved in this method of agricultural instruction.

By the spring of 1939 the farm school was well established, and many of its early mistakes had been corrected or overcome. Of the one hundred ninety-four boys who had graduated from the school up to that time one hundred seven, or 55 per cent, were engaged in farming on their own or their parents' land. This is not a bad proportion by vocational standards. Nineteen former students, or about 10 per cent, were serving as farm managers for well-to-do owners. Fifteen were teaching school. Ten were continuing their studies in foreign countries, and thirty-one were employed in the various agricultural services of the state.

In addition to the main objective of preparing young farmers for their future vocation, many other activities of an educational nature had been successfully promoted. These included public health programs, in particular malaria control; summer refresher courses for village teachers; and a service of agricultural extension operated by the residents of Perparimi as one of their community responsibilities for the benefit of neighboring farmers.

Throughout the existence of the Albanian-American Institute the Government of Albania usually went considerably beyond the obligations agreed upon under the terms of its twenty-year contract

with the Near East Foundation. At the time of Mussolini's invasion in 1939 barely half of this period had elapsed, and yet the local authorities were already assuming a much larger proportion of the operating expenses than was stipulated in the contract, which called for an annually increasing share of the budget.

Plans were under way at the time of the invasion for additional improvements to the program in the light of ten years of experience. A further reduction in the period of training was contemplated. The area from which students were selected was to be restricted as a means of localizing the instruction and concentrating on a limited number of farm enterprises that could be effectively taught. Graduates of the school were to be visited more frequently and systematically. Early surveys were to be supplemented by more comprehensive studies in order to determine just how the most successful farmers were conducting their small businesses and why others failed. Such information, it was felt, would be of great benefit to the whole school. However, all these hopes and plans of the Albanian-American Institute came to an abrupt end with the Italian occupation, and today this struggling little country lies beyond the reach of the free world.

Before leaving the subject I should like to refer briefly to one other farm school which I have discussed elsewhere* in greater detail. It is a training center so modest in size that it is likely to escape the attention of most educational observers. But in many respects its very simplicity makes it a better illustration of the points I am trying to stress than the institution already described. An outline of a few of its features should help to summarize the salient points of this discussion.

The school to which I refer is the Rural Central School near the village of Morphou on the island of Cyprus. After nine years of operation its enrollment is still limited to about forty boys, despite considerable pressure to admit more. Those in charge of the project wisely decided to keep it small to insure better instruction.

Completion of the elementary grades at a village school is the

* In *Rural Education and Welfare in the Middle East* (1946), published by Her Majesty's Stationery Office.

only educational requirement for admission to the course. In addition, an applicant must have worked for at least two years on a farm. Graduates of a secondary school are seldom admitted. The course at Morphou does not prepare for advanced theoretical training in agriculture, and those who complete the program are not entitled to Government assignments. The course is two years in length, and the instruction is largely of a practical nature.

The farm land is only about forty acres in extent, and even this limited area is divided into smaller plots to conform more closely to the average peasant holding. The livestock consists of a few cows, mules for draft power, a small flock of sheep, a piggery with good breeding sows. There is a well-organized poultry unit operated along lines suitable for a village enterprise. The model market garden is of a size appropriate for such a commercial unit on this small island. The farm implements are of the simplest type. There is a shop where the boys are taught the repair and maintenance of farm equipment. All the buildings are of native-type construction, and the students live in cottage homes each with its own kitchen garden.

In Cyprus, as in many other parts of the East, it is important to encourage diversified farming to insure several sources of income or of food. Specialization, whether in cash enterprises like the growing of tobacco or in edible crops, does not usually provide a sufficient degree of security. The Morphou school therefore offers training not only in mixed farming appropriate to the area, but also in related enterprises such as food preservation, canning, butter and cheese making, the curing of bacon and ham, and a few homecrafts.

To meet the increasing demand for this kind of instruction in a predominantly agricultural region, a second vocational center has been established in the village of Pergamos. In an island of the size of Cyprus it is unnecessary to limit enrollment to students from a small area, as is advisable in larger countries with a greater variety of agricultural practices. Rather, in accordance with the two major racial groups of the island, the division is along language lines—the Morphou school now admits only Greek-speaking students, and the Pergamos center uses Turkish as the medium of instruction.

The second center is being organized along lines similar to the



Director Ralph Allee (at right) with visitors from nine neighboring villages.



Village chiefs wearing the Skanderbeg coat as they attended dedication of the new buildings in 1933.



Dr. Tatiana Zlatkova operated a clinic for the neighboring Albanian villages when not busy with the students of the schools.



Cyprus farm-school students starting for the fields.



Cyprus farm-school boys in the living room of the cottage dormitory.

A typical high-wheeled oxen-drawn cart of Albania.

one at Morphou, but the present-day students are enjoying an exceptional advantage. They are participating in the organization and the construction of the new school. There are as yet no farm buildings or quarters for the staff, and both teachers and pupils live in tents. The planning and the laying out of the farm as well as the construction of the buildings will require several years under this novel arrangement. But these charter members of the new school are being given opportunities for vocational training that will never be available to those who follow in their footsteps.

The organization of the Morphou and the Pergamos program corresponds closely to the basic pattern which needs to be followed if a farm school is to function successfully in underdeveloped rural sections. In a country of considerable size and diversity it should be located in the region from which most of the pupils are enrolled. The course of study must be short. It is dangerous to generalize, but two years of vocational training might well be considered the maximum. Short unit courses of instruction are much better. The requirements for admission should be kept to the minimum and in many places should involve little more than the ability to read and write; possibly not even this need be compulsory under certain conditions. The program should emphasize the practical rather than the theoretical side, and whatever the ratio of the two, the instruction should be applicable to farming as practiced in the locality. The vocational training center, with suitable and practicable improvements, should reflect the mode of life from which the students come and to which they must shortly return.

Preparing rural youth for the hard business of farming in underdeveloped parts of the world is a task which is neither easy nor simple. The most earnest attempts to do the job well are certain to meet with serious obstacles. Many institutions with vocational aims require a thorough overhauling if they are to contribute to better farming in the next generation. But with proper organization, the application of a few sound principles of education, a little common sense, and a measure of caution, success in fair degree can usually be assured.

[CHAPTER VIII]

Make the Rural School Rural

[PALESTINE]

REFERENCE has been made in previous chapters to the tendency of elementary schools in rural areas of the Middle East to follow traditional academic patterns in their courses of study. This has frequently resulted in instruction which failed to reflect in any appreciable degree the local environment. We saw how Major Kynaston-Snell of Eritrea sought to avoid that weakness as he went about the challenging task of providing schools for a country which had been almost totally lacking in such basic facilities.

The problem, however, of making the rural school truly rural and thereby adding greatly to the vitality of the curriculum is one that deserves fuller treatment. I should therefore like to turn to yet another country in the Eastern Mediterranean—Palestine. In the years between the two world wars and for a short time thereafter, Palestine had done a better job than almost any other Near Eastern state in the particular field of education to which I have just referred. Year by year the educational facilities had been improved and extended, and unusually fine progress had been made in relating the village school to its rural environment.

My contacts with Palestine began in 1930, and it was then that I paid my first visit. The Near East Foundation had entered into an agreement with the Palestinian Department of Education to cooperate in an experiment to improve the rural schools. The arrangement continued for five years. Because of my connection with this

unusual venture and my increasing affection for the capable and scholarly educational director of the country, Humphrey Bowman, I continued to visit Palestine even after the termination of the project. After the war, in 1947, the Near East Foundation was given another opportunity to contribute in a modest way to the further development of rural education in Palestine, and in that year I returned once more to give what encouragement I could to this latest refinement.

As I drove about the countryside, I recalled the unusual progress of the small ancient land which is no larger than Vermont and hardly as fertile. I had watched the rapid growth of the agricultural colonies established by the Zionists. I had visited their fine experimental station at Rehoboth; I had seen barren hillsides transformed by these people into beautifully wooded spots.

In discussing these observations with my Palestinian friends, they usually added a few words of caution. They pointed out that certain things I observed represented wonderful achievements, but they also called my attention to the fact that these developments were financed almost entirely with funds from outside the country. Valuable and important as the improvements were, they could not be said to have been created out of the resources of the land.

My thoughts then turned to the developments I had seen among the Arabs who constituted the great majority of the population. Here progress was not so spectacular. In fact, it was often hard to see unless one looked for it; but it was there nonetheless and in considerable abundance.

During the period when I frequently visited Arab Palestine I observed many a step forward even if the pace was slow. Moreover, most of these signs of progress could be seen in the rural sections among the peasants, or fellaheen, and not only among the townspeople. What was even more important, all these efforts had been financed for the greater part out of the limited resources of the country. In carrying out the responsibilities of their mandate under the League of Nations the British had promoted better health, improved the agriculture, and provided more and better educational facilities. But the practical British, highly experienced in matters of

this kind, made sure that most of these measures were supported from the national income.

The increase in the number of schools had been tremendous, particularly in rural areas where they were most needed. The Arab section of the Department of Education had developed an entirely new type of school for the rural districts, and much of the progress was due to one man—Ahmed Qasem, who had dedicated his whole life to the promotion of educational facilities for the children of the fellaheen.

It was Ahmed Qasem who accompanied me on my tour of inspection in 1947 which was to be my last visit to the strife-ridden land. Soon after, the tense political situation erupted into open warfare between Jews and Arabs and brought to a sudden end all the plans and achievements of Ahmed Qasem and his many fellow workers in the Palestine Educational Department. But the experience that was gained and the lessons that were learned in organizing this great movement in rural education should not be forgotten.

The story of how in Arab Palestine the rural school was made truly rural goes back twenty years or more. In fact, to provide the proper setting we need to turn to 1920, for it was in that year that Humphrey Bowman became director of the Palestinian Department of Education. Bowman was no stranger to the Middle East. From 1903, except for a period during World War I, he had been a member of the British Colonial Service with assignments in Egypt, the Sudan, and Iraq. Most of this time he was actively engaged in school work. Palestine was a fertile field for an educational leader of vision and drive, and Director Bowman immediately began to apply his experience to the problems of education in his new field of operation.

He shortly discovered that he had to formulate an educational policy for a country which had never possessed such a thing before. There were a number of Arab schools, almost all in the urban areas —a few fairly good ones but some hardly deserving of the name. Many Christians sent their children to mission schools. The Jews had already evolved and were maintaining a school system of their own, in which Hebrew was the medium of instruction. They were

given, from the start, a small grant-in-aid, like all other non-Government schools. It was admittedly far from commensurate with their needs if education were to be provided for all Jewish children, and their budget was insufficient to cover expenses. But since the Jews demanded complete independence in their educational system, the Mandate Government, with its limited resources, did not at first feel justified in doing more. The Jews had considerable funds for educational purposes from foreign sources, whereas the Arabs were limited to the modest budget provided by the Department of Education. Eventually a more substantial grant was made to Jewish schools, although it was limited to the proportion of Jews to Arabs of school age, and Jewish inspectors were appointed to the Government Education Department. Yet the Zionist authorities continued to operate their schools with as little interference as possible from the Government, and Bowman considered that his most urgent task was to do something for the long-neglected indigenous population.

The majority of these Arab people were illiterate, while the literate minority were largely ignorant of their own language. This condition was due to the fact that during the period of domination by the Ottoman Empire, Turkish had been the language of instruction in the poorly administered town schools, and the few elementary grades that sometimes existed in villages were little better than old Koran classes.

In 1920 the enrollment in all Arab public schools amounted to no more than 10,662 out of a total Arab population of nearly 600,000.* Even that small number was concentrated largely in the towns. By 1928, Director Bowman had succeeded in doubling the figure; but he was far from satisfied, since he was interested in something more than mere numerical growth. He desired to see an expanding development which was not confined largely to the urban communities of a predominantly rural country. As in most other areas of the East, Palestine derived its main support from the soil, either in the form of agricultural crops or from the many flocks that moved over the sparse pastures. Here, as elsewhere, the farmers

* In addition there were 65,300 Jews in the country.

represented the backbone of the country. It was important, Bowman felt, that their needs should be placed at the top of the list, not at the bottom as is so often the case.

Bowman's long experience in the Middle East had taught him that rural children needed more than instruction in the three R's. Everywhere he went, he found that such schools as existed in country districts were wholly unrelated to their own environment. They followed the pattern of most urban schools, with the result that their programs were apt to be poor imitations of those conducted in the larger towns. If the system was to be changed, age-old traditions would have to be broken; and traditions are not easily discarded, particularly in the East. Nevertheless, Bowman was convinced that young citizens who would spend their lives cultivating the land or guarding their flocks should be taught to understand and appreciate their surroundings. Their study of the three R's should somehow be interwoven with those elements which would form a definite part of their existence. Even while in school they should start to live the life they would lead in later years and learn how to dwell in the land of their forefathers more effectively and happily.

From the first year of his appointment in 1920, Bowman, with the active support of the High Commissioner, Sir Herbert (later Viscount) Samuel, had concentrated on opening new schools in Arab villages. The number grew rapidly from year to year. The villagers provided at their own expense, sometimes with a small grant from central funds, the school building which was constructed according to a model plan, as well as any land required for agricultural purposes. But the scheme of giving these schools a rural bias had not progressed, since it was handicapped by the absence of teachers trained for the purpose. Somehow this difficulty had to be overcome.

In the late 1920's, when Bowman determined that the time had come to take more positive action in the matter, he met two men who were keenly interested in the same problem—Barclay Acheson, at that time Executive Secretary of the Near East Foundation, and the late Paul Monroe, trustee of the same Foundation and internationally known as an educator. On behalf of their organization these

two Americans were making a study of the basic educational needs of the Near East, and they had become convinced that in a part of the world so predominantly agricultural various forms of rural education should be given first consideration. When these three leaders of educational thought discussed problems of mutual interest, they found that by separate routes they had arrived at similar conclusions.

Barclay Acheson pointed out that surveys already completed clearly indicated that the predominant part of the population of the Middle East had been by-passed by practically all types of American philanthropy—religious missions, health organizations, American schools. It was to this major group that the Near East Foundation now planned to devote its efforts by helping the people raise their standards of living through rural schools, improved agriculture, better health practices, and cleaner homes. In general terms such an objective seemed to Director Bowman almost too obvious to warrant further discussion, but his interest was aroused when Acheson and Monroe went on to explain that the new organization hoped to work in close cooperation with the various governments of the Near East, undertaking specific projects in certain areas by official invitation. In responding to such requests the programs conducted by the Foundation would be modest in size and in the nature of demonstrations. One aim of these demonstrations would be the development of suitable methods required in solving certain specific problems. When this goal was achieved, the local administration would be expected to take over the system and apply the techniques on a country-wide basis.

Bowman quickly realized that such a demonstration might well provide the solution he was seeking. Could the Near East Foundation, he wondered, be induced to help him break down some of those traditions that were hampering his efforts in the rural schools, or, to state the proposition in a more positive fashion, might it be willing to cooperate in an experiment the object of which would be to find better methods of instructing peasant children? The suggestion appealed to the two Foundation representatives because they felt that any sound ideas developed by such a project would be

sure of adoption in Palestine, at least as long as Humphrey Bowman was connected with it. Out of this meeting, therefore, grew a cooperative undertaking which greatly contributed to the future development of the village school in that little country.

It was Bowman's conviction that if the rural school curriculum was to be improved, a start would have to be made by improving the teacher. He decided that the quickest and best way to accomplish this, in the beginning at any rate, was to provide additional training of the right sort for those teachers who had already shown some degree of aptitude for their work. Most of these instructors were ill prepared, and the Education Department's limited supervisory staff could not at that time provide much on-the-job training. However, the best among them, helped by their practical experience, should be able to absorb rapidly new ideas and additional knowledge.

Consequently, under a four-year agreement, it was decided to select each year fifteen village schoolmasters for twelve months of "postgraduate" study. For this period of intensive work they were to be placed in a new agricultural school at Tulkarm in the district of Samaria. Established by the bequest of a benefactor, the late Sir Ellis Kadoorie, and maintained largely by Government funds, Tulkarm was intended as a vocational center. Here, in appropriate surroundings, the teachers could study gardening, horticulture, poultry raising, beekeeping, and other agricultural subjects, as well as rural sociology and methods of teaching. Ahmed Qasem was assigned the task of directing the teachers' hostel and supervising the practical work of the students in addition to teaching a few courses. Previous to this assignment Qasem had devoted much time and effort to induce poorly trained and often disinterested teachers to cultivate garden plots with their pupils. The plan had been a little ahead of its time, and Ahmed felt that his work at Tulkarm would bring his dream—a garden for every school—nearer to its realization.

In the late fall of 1930 the first class of fifteen teachers started training. Thereafter, a different group was brought in each year for the special period of instruction. On completing their studies,

the masters returned to their schools. So that they should not revert to their old ways or become discouraged, a special supervisor was appointed to assist them in applying their newly acquired ideas. By the end of the four-year period sixty village teachers had been given the additional training. In agreement with the Near East Foundation, one more selected group was brought to Tulkarm, thus making the total number around seventy-five. The job now appeared to be done, its purpose fulfilled. From this point on, the Department of Education needed to appraise and apply the results of its findings.

The five years of experiment had brought out a number of interesting points, most of which confirmed the opinions held by Bowman. It was found, for instance, that village youngsters had the interest of all normal boys and girls in plants, animals, and things agricultural in spite of the drabness of their own rural surroundings and that their interest could be directed along educational lines. They enjoyed gardening, tending crops, and caring for animals, as well as studies in natural science, when these activities formed a part of their regular program and were not something extra —taught out of school hours. Moreover, it was found that, with proper organization, school gardens could be successfully developed in Palestine and that they provided the springboard or point of departure for all manner of educational activities.

One other important observation was made. It was discovered that the rural schoolmaster could and would, with training and supervision, participate intelligently in the everyday problems of village community life. This observation was of far greater significance than may appear at first glance. It was in direct opposition to the traditionally accepted order of things. However limited his education, a teacher in the East is apt to think of himself as belonging to what he believes to be the academic tradition. He considers himself a man apart, above the manual laborer, and he enjoys a certain prestige which he greatly cherishes. Perhaps it is because he has acquired a certain amount of knowledge which is not easily available to his unlettered fellow men and which is for that reason greatly prized. Whatever the reasons, it appeared that his attitude could be changed to some degree or made to serve more useful

ends. When the schoolmaster showed that he could relate his knowledge to the ordinary problems of the village, he found that he increased his claim to the people's respect instead of diminishing it. Their awe gave way to affectionate appreciation.

Once the results of this five-year demonstration were fully appraised, Humphrey Bowman had a sound basis on which to proceed with the reorganization of village schools along the lines he had long contemplated. He was now in a position to take more aggressive action. The schoolmasters who had enjoyed additional training at Tulkarm were to be the vanguard in a progressive movement. Thus the cooperative experiment with the Near East Foundation was only an incident in the long-range program of making the rural school truly rural, but it had greatly speeded up the process of reaching its goal.

In all schools gardening and elementary agriculture were included as a definite part of the syllabus. In the lower primary schools with only four grades, the third and fourth year pupils were given two periods a week of "theoretical" agriculture and four of practical work most of which time was spent in the garden. In elementary schools with seven grades, the children began their agricultural studies in the fourth year. These continued during each of the remaining years at the rate of three periods a week of practical work and one of class study. Secondary schools in rural areas included agricultural instruction in the first two of their grades.

It was surprising how much could be done in this limited amount of time and how keen an interest the children exhibited when they realized that agriculture was a part of their formal instruction. Ahmed Qasem, who had returned to his former post as supervisor of school gardens, was quick to utilize these new trends, and his own indefatigable enthusiasm was reflected in the constant improvement of the school grounds and garden plots.

During the operation of the Tulkarm program a fairly large number of teachers had been retrained for village work within a comparatively short period of time, but now the procedure of training future teachers was changed. It was felt that basic agricultural instruction should precede rather than follow the pedagogical instruction and

that village schoolmasters needed to be more systematically prepared in advance of their jobs instead of having to be retrained at a later stage, valuable though that method had been at the start. Under the new policy a selected group of graduates of the two-year agricultural course at Tulkarm were offered one additional year of teachers' training. The numbers, however, were all too limited for the need and, to make matters worse, the work was repeatedly interrupted by the periodic upheavals which plagued Palestine during the decade preceding World War II. The preparation of rural teachers therefore remained the weakest link in the Palestinian program, although this deficiency was in part made up by the excellent supervision and in-service training provided by the Department of Education.

One of the most significant moves made by Bowman immediately following the five-year experiment was to establish a training center for young women who desired to become rural teachers. In most predominantly Moslem areas, including Arab Palestine, the education of girls and young women tends to lag, and Bowman was determined to remedy the unfortunate situation. There were few village schools for girls, and even where they existed the quality of the work was generally below the standard maintained in the towns. Once again the key to the problem lay in better training for prospective teachers, and with this solution in mind the Department of Education established in 1935, in the village of Ramallah, ten miles north of Jerusalem, a training center for young women. Thirteen Moslem girls who wanted to become rural teachers were accepted for the first class. The number was deliberately kept small, partly because of the importance of admitting only those with genuine interest in their work and partly because care had to be taken that the output of women teachers did not exceed the demand. There was also the necessity of providing a large amount of individual attention in such a course. For these reasons the enrollment never went above forty.

Under the capable leadership of a Palestinian, Miss Elaine Lubbat, the school enjoyed measurable success from the start. In the first years of the program young women with no more than five

grades of primary school were accepted, but as the education of girls improved seven grades were required, and eventually there were even a few candidates with one or two years of secondary schooling. The course of study was originally for two years, but it was later extended to three. Town girls having rural interests or considerable contact with village life were sometimes accepted, since it was difficult in the beginning to secure the required number of country girls with even the minimum of five years of schooling. Each student signed an undertaking to teach in a village, and all the young women had to prove that they would be able to provide a chaperon, a mother or an aunt, to live with them wherever they might be placed.

The Ramallah timetable was a heavy one, comprising forty-six periods per week. Besides the regular secondary course of study, there were such subjects as domestic science, child care, and elementary agriculture. The girls received instruction in all phases of weaving, including the washing of wool, carding, spinning, and dyeing. They learned about food preservation and how to keep rabbits, poultry, and turkeys. Each year, by a system of rotation, two of them were sent to an outlying district for a period of two or three weeks to teach other girls a few of the things they had studied and thus gain teaching experience.

The agricultural instructor of the center was Miss Na'ima Jubran, and under her supervision each student cultivated an individual garden plot. This young woman was an expert at breeding rabbits, poultry, and turkeys and even kept an incubator in her bedroom in order to be able to give it her constant attention. Among agricultural men Miss Jubran rated as an excellent farmer and a good teacher.

It has been shown how Director Bowman succeeded in raising the level of rural education in Palestine by tackling the problem at its source—the training and retraining of teachers of both sexes for their special work in village schools. Before proceeding further it is necessary to take a closer look at some of the schools in which these teachers served. To that end I have selected a few typical

examples of schools which I visited on one or another of my inspection tours; the first is the Beit Dajan school for girls.

This school was a one-teacher center with four grades and forty pupils. The instructor was not a graduate of Ramallah, but she kept in close touch with that institution, and her school was frequently used for observation and practice teaching by the students. The curriculum included several periods each week of instruction in practical subjects, such as embroidery, sewing, mending, and food preservation as well as gardening. There was a small garden plot adjoining the school, and several of the pupils were preparing the seedbeds at the time of my visit. The children were eager and bright, and they appeared to be securing a sound, well-balanced education that would stand them in good stead in their afterschool years.

The Beit Dajan school for boys was only a short distance away, but at the time of my visit it was having its spring vacation. However, two of the pupils were on guard. Their job was to keep down fast growing weeds, supply water when needed, and keep off marauders. For the work they received twenty piasters a day, which was paid out of the proceeds of the garden.

The two youngsters were eager to show me their school, and I learned from them that there were three hundred pupils in seven grades having the same number of teachers. One of these instructors served as the agricultural expert. The garden covered about eight dunums, which is the equivalent of two acres. It was in excellent condition. There were flowers, all kinds of vegetables, field crops, and fruit. There was a sizable plot of tomato seedlings which the boys said were for sale. There was a neat poultry house with about twenty laying hens. It was plain that these two pupils were proud of their "farm."

A typical example of a much smaller school was the one-room one-teacher unit at Khairiga. The Khairiga school was housed in a little, unpretentious stone building by the side of the road. The grounds were enclosed with a neat wire fence. Immediately in front and at the side of the building was a space for the children to play;

a few yards to the south was the garden. Scarcely an acre in size, it contained a variety of flowers and shrubs, a well-tilled vegetable section, and two or three short rows of tree seedlings. The largest plot of the area was given over to grain, but when I made my visit the crop had already been harvested.

The classroom presented a most unusual sight. It looked more like a farm storage than a schoolroom. Piled up in one corner were several big heads of cabbage and a few other vegetables. Near by was a partly filled bag of fertilizer. In another corner was a pile of freshly winnowed wheat. The thirty or forty youngsters sitting at plain double desks almost filled the small room. In fact, with pupils, teachers, loosely piled grain, vegetables, and other farm items, there was little empty space.

The arithmetic lesson in progress at the time was based on the problem of dividing up the wheat crop among the families of the upper-grade pupils. The wheat had been of an improved variety, and the yield had been good. Now most of the product was to be taken home by the boys to be used by their parents as improved seed for their own plantings. It would not go far, but it represented a start toward higher production. In this instance the work at the school was obviously reaching into the home. The instructor was one of the men trained at Tulkarm.

The school at Tireh will serve as an illustration of how the larger units were organized and developed. Tireh was an Arab village and had an elementary school with all seven grades. There were eight teachers and about three hundred pupils. The irregular, nondescript building was beautifully situated on a slight elevation in the midst of many trees. The garden was a little over five acres in extent.

The layout was similar to those found in other places except that it was larger and included nearly every agricultural enterprise common to the region. There were the usual vegetables, fruit trees, and grape vines and a separate plot devoted to a crop of potatoes. A nursery produced seedlings of both forest and fruit trees. There were several hives of bees and two poultry houses, one of which had been constructed from funds contributed by the village. A three-hundred-egg incubator had been operating throughout the season, and each

boy was allowed to bring fifteen eggs from home to be hatched at the school.

The boys of the two upper grades had their own individual garden plots. There was also a system in operation which I had observed elsewhere of dividing up the various agricultural enterprises of the school and assigning one boy as the head of each department. The assignment usually was for a period of three months, during which time the boy was held responsible for the maintenance of his project with several other pupils acting as his assistants. Eventually every ambitious boy had an opportunity before leaving school to serve as the head of a department.

The growth of Tireh in one short decade was typical of many similar schools. The headmaster, who was also the agricultural instructor, had come from Tulkarm ten years before. At that time he found himself assigned by the Education Department to a one-teacher school with thirty-eight pupils. Year by year the enrollment increased, and rooms were added as needed to the original small structure. This accounted for the lack of symmetry and the rambling appearance of the building.

Among the various worth-while activities fostered by the Tireh school was a circulating library for the village community. The idea originated with Ahmed Qasem, who had picked it up several years before the war during a tour of Near East Foundation programs in the Balkans. Upon his return he introduced this new feature in his own schools, and the scheme proved remarkably successful in view of the high degree of illiteracy that still prevailed in every village. The few who could read were hungry for books, and many of those who could not induced friends or their own children to read to them. The demand for books from the villages was so great that at first, when the supply of appropriate material for adults was limited, Qasem was forced to transfer his stock from one village to another, the books remaining at one school for a period of a few months only. Later when the supply was augmented, he was able to leave in each place a full set of books, with the headmaster or one of the teachers responsible for keeping the material in circulation around the community.

Steadily the village schools of Palestine grew in numbers, and increasingly they were made to reflect the rural pattern of life. All these centers, the new and the old, followed the constantly improving curriculum prescribed by the Department of Education. There were of course variations, and the work progressed better in some places than in others. The school garden came to be considered more and more as an essential device in interpreting the study program. There was a continual increase in the number of plots, and as they developed in size and in quality, they offered a wider scope of activity. Each year there were a few more agricultural instructors with special training assigned to develop the rural interests of the schools. Before long Ahmed Qasem had four assistants, one for each of the four educational districts of the country. In time the Government increased its financial support of the garden program, at first slowly and modestly but later much more rapidly and generously.

We now approach the end of a period. The last full year of activity in Arab Palestine was in 1947. Since chaotic conditions developed early in 1948, the statistics of the Department of Education for the preceding year were never fully reported. Many of the facts are available, however, and a few of them make interesting reading. By 1947 there were approximately 80,000 pupils in the Arab public schools (besides another 43,000 in Moslem and Christian private schools), and it is significant that about 60 per cent of this number were village children. Of the slightly more than 500 public schools for Arabs, nearly 400 were in villages. Twelve new units had been added that year. But there was still a long way to go. Public school education for Arabs, both urban and rural, was reaching only about 57 per cent of the boys and 25 per cent of the girls of school age.

In the same year a new training college was nearing completion. The construction was well advanced at the time of my last visit, and the main building was expected to be ready for occupancy by the following year. Located in open country but in a district dotted with rural settlements, it was designed to accommodate 400 elementary school children from the surrounding countryside while

providing facilities for 100 teacher trainees. With an institution of this kind in operation the teacher training program would have been considerably strengthened.

Of the 400 Arab village schools in existence at that time, somewhat over 250 had gardens which were rated as meeting the required standards. Many were outstanding. The area devoted to school gardens totaled 3,070 dunums, or just under 800 acres. This amounts to slightly over three acres per school; naturally many of the plots were much smaller, while a number of them had acreages bordering on the size of small farms. In 118 of the schools there were specially trained teachers to develop agricultural and other rural interests, but under the supervision provided by the Education Department many of the ordinary village schoolmasters had also become expert agricultural instructors.

The year 1947 was a poor one for many crops, including the production of honey, as rainfall was low. Nevertheless the harvest gathered from the school gardens was impressive. Fresh fruit amounting to 360 tons was produced and sold at the local markets. There were 90 tons of vegetables, 23,033 fruit-tree seedlings, and 242,000 vegetable seedlings. Nearly a ton of honey was produced by 215 hives of bees. One of the schools with an unusually active carpenter shop constructed 100 new beehives, which were sold to those especially interested in developing better apiaries.

The pupils reforested barren hills, laid out little parks which would eventually provide shade, lined the roads with trees. In 1947 alone 105,000 forest-tree seedlings were distributed, and school children helped plant 65,000 of them. For several years the Forestry Department of the Government had supplied all the seedlings required, but gradually the requests became too numerous and the schools started to develop their own nursery plots. Still the demand could not be met. Consequently two or three schools which were favorably situated for such an enterprise extended this feature of their work in order to help meet the need.

Poultry breeding on a small scale had been practiced from the start in a number of schools. In later years the Department of Agriculture encouraged the activity since it wished to increase poultry

production in the villages. It therefore provided twenty incubators of fairly large capacity for use in rural schools and shared in the cost of building suitable incubator rooms wherever these were needed.

As these various enterprises expanded, they resulted in a considerable income. The money was not turned in to the State Treasury, but could be retained for the benefit of the individual schools, particularly their rural activities. However, all income from school produce had to be strictly accounted for and could be spent only with the approval of the district inspector. Before any sales were made, pupils were permitted to take home to their parents free of charge about one-third of the total produced.

This measure may in part account for the fact that the children never felt exploited or grew tired of their work. In other regions I had on occasion observed such a reaction on the part of both teachers and pupils even where the programs were much more modest in size. There was never the slightest indication of such an attitude in the Palestine schools, principally, I believe, because there the agricultural activities were well integrated into the educational system.

Among the various factors that contributed to the successful developments reviewed in these pages were some which have not so far been mentioned. Most important were the prestige and importance officially attached to agricultural work of every kind. In the beginning this was merely an expression of the personal viewpoint of the educational director, but that viewpoint soon spread. Bowman enlisted the aid of the High Commissioner, who took pains to recognize rural achievements by every means at his disposal, and the policy seeped down through the ranks to public officials of all kinds, health officers, agricultural inspectors, district commissioners, and teachers. In short, it became "fashionable" in Palestine to be rural-minded. This had its superficial aspects, of course, especially in the beginning, but the general effect was all to the good.

Another important factor was the continuity of sympathetic and intelligent direction of the program. I have referred in some detail to the efforts of Humphrey Bowman because he was the pioneer in

the movement. It happens frequently, however, that a philosophy considered basic by one director is not treated with the same respect by his successor, who may have other interests. Fortunately such was not the case in Palestine. Bowman was succeeded early in 1934 by Jerome Farrell, who was equally interested in protecting and developing the rural aspects of the educational system. In 1946, when Farrell retired, Bernard de Bunsen took over the reins and continued in the path set by his predecessors.

A vital factor in the succession of good British direction was represented by Ahmed Qasem, the Arab. It has already been pointed out that every successful enterprise in rural reconstruction can be identified with a particular personality. In the case of the Palestinian program this personality was without a doubt the enthusiastic and resourceful garden expert. True, Humphrey Bowman pioneered and inspired the movement. The two directors who followed him expanded and amplified the program. But the connecting link, the man who helped bridge the gap between one director and the next, was Ahmed Qasem. He continued in the education service from its inception to its end, and although, over the years, he received many offers to go into more lucrative work, nothing could entice him away from his major interest—the country school.

Ahmed Qasem was a graduate of the American University at Beirut. Upon completing his four-year course of study, which included the few agricultural subjects offered at that time, he secured a position as teacher of science at the secondary school in Nazareth; it was there that he first met Director Bowman, who visited the school on one of his tours of inspection. Qasem approached the director with the suggestion that courses on agriculture should be introduced into the curriculum of the Nazareth school since the people of this ancient town were predominately farmers. By way of testing the young man's determination Bowman countered with the suggestion that it was up to Qasem to try out the idea if he considered it so essential. Thus the following year agriculture was introduced into the school program, but only as an extra, noncompulsory, subject. Qasem leased a small plot of ground in order to be able to include practical work, and pupils from the first two grades

of the Nazareth secondary school made history by being the first youngsters to study agriculture in an Arab public school.

One year of the experiment was sufficient to convince Director Bowman that Ahmed Qasem was the man he needed to spark-plug his plan of giving a rural bias to the village program of education. He created a new position, with the title supervisor of school gardens, and offered the job to Qasem. The following summer Ahmed brushed up on his agricultural knowledge by spending three months at one of the training stations operated by the Department of Agriculture, and by fall he was ready for his new assignment. He found out shortly that any progress he made in the beginning was largely a matter of persuasive salesmanship. He induced a few of the more progressive teachers to add a little instruction in elementary agriculture to their program of teaching, and he cajoled a few villages into donating plots of land. It was slow, uphill work, but it represented a beginning, and once he had secured his foothold he never looked back.

Throughout his career Ahmed Qasem availed himself of every opportunity to add to his own professional equipment. In 1933 he accepted a grant from the Near East Foundation to study its programs in Greece, and while there he was continually on the watch for new ideas which he could apply in his own work. One feature that interested him greatly was the community reading room which formed part of the Foundation's Macedonian Program. We have already noted that immediately upon his return to Palestine he began to introduce the feature into his own program. In 1937 he had the good fortune to be awarded a six-month tour of England to study school gardens in that country. He made the best possible use of this additional and valuable training in his professional career and thus became an outstanding leader in his field.

There was one final development of the Palestine program which without doubt would eventually have had a wide and beneficial effect on the country had it not been cut short in its infancy by the events of 1948. As a result of years of progress the village schools, and in particular the agricultural instructors, had won a definite place for themselves in the hearts of the rural people. But although

the schools reached out into the homes through the children, there was still need for a wider community service giving more attention to the adult and to the youth who had left school at an early age. The Department of Agriculture rendered many valuable services to the farmers, but no up-to-date system of agricultural extension had so far been developed. The question arose as to whether the village school could not in some way fill the need. Why should not the agricultural instructors be relieved of all work unrelated to their special field of interest and devote the extra time gained to out-of-school activities?

In the United States the federal system of vocational agricultural education deals extensively with out-of-school groups, and it was felt that American experience in this branch of education might have a valuable contribution to make to the situation in Palestine. It was decided, therefore, that a fellowship grant should be given to a member of the Palestine educational service enabling him to study in the United States for a limited period. The Near East Foundation welcomed the opportunity of making an additional contribution to an educational program in which it had long been interested, and a one-year scholarship was offered. Rashad Sadeddin, one of the successful Arab teachers, was selected for the award.

Sadeddin had grown up in a village and had been educated at the Arab College. He had taught in a country school and later had undergone the additional training offered at Tulkarm. So successful was he as a teacher that he was promoted after a few years to the position of assistant supervisor of school gardens under Qasem. His great interest and ability in the field of rural education made him an excellent candidate for further training, and he utilized his opportunity to the fullest extent. He completed his year at an American university with an excellent record, earning his B.S. degree, and went back to Palestine in the summer of 1947.

On his return his first step was to request the Department of Education to relieve him of most of his supervisory duties. He wanted to return to a village as an ordinary teacher in order to test out his newly acquired ideas and to demonstrate just how the job of organizing a community-wide service could be handled. The place he

chose for his initial demonstration was the village of Al Mansi in the region of Haifa.

Mansi was a peasant village with a population of about two hundred families; and its school offered six grades and had an enrollment of two hundred fifty pupils and a staff of five instructors. It had been established in 1934 as a one-teacher unit with thirty-nine boys. In addition to the grounds surrounding the building there was a garden of three acres. This had been developed along the usual lines. For the past year or so the aim had been to add a seventh grade and thus have the complete elementary course. But the step had not yet been taken. This missing link provided just the sort of opportunity Rashad Sadeddin was looking for.

Experienced teacher that he was, he decided to bring together the village boys who had completed the sixth year and give them a few seventh-grade lessons himself. He also invited to the group other youths who had left school some time before. The daily schedule was heavily weighted with agriculture. Moreover, Rashad began to organize home projects which the boys were to carry out on their fathers' farms. He was convinced that with modifications this method of instruction which had proven so successful in America could be made to function even under the patriarchal system of the Middle East.

Nor did he stop with these activities. Soon he gathered together a group of adult farmers for informal, practical instruction in better methods of farming. The confidence which these men already had in the school spared Rashad many of the difficulties that are frequently encountered in organizing such work. With Al Mansi as his laboratory this inspired teacher began to build up a community service within the framework of the village school which would in time have reached out into every home of the land.

We have come to the end of our Palestine story. Enough has been said to show clearly what can be done with proper organization and direction to make the rural school truly rural. Nor is there any doubt that if this latest development had been allowed to continue, it would have justified all expectations. In increasing measure the village school would have become the radiating center of all kinds

of worth-while activities, thus raising to still higher levels the standard of life of the entire community.

In concluding the chapter one cannot help but reflect on the sad plight of the Arabs of Palestine at the present time, particularly in the light of the extraordinary progress that was made in the two preceding decades. Approximately three-quarters of a million of them are scattered in surrounding countries existing in caves, barracks, hastily improvised shelters, and tents, with only a few of the more fortunate finding the means to start life anew. History teaches that slow and painful progress is followed all too often by sudden backward slides. It is to be hoped, however, that the next forward movement will bring to these people an even better way of life than they have ever before known.

[CHAPTER IX]

Apply the Latest in Science

[GREECE]

IN all the various projects thus far reviewed, the emphasis has been on bringing about a gradual evolution from within rather than on imposing a drastic revolution from without, on starting with the material at hand—tradition-bound minds, primitive conditions, and limited resources—and then, from this point of departure, gradually introducing improved practices on the farm, in the home, and throughout the community. In a comparatively short space of time considerable progress was, in each instance, achieved, not by the wholesale application of Western methods but by the systematic introduction of a multitude of little improvements, the sum total of which resulted in higher production, increased income, better homes, healthier lives, and altogether more abundant living.

Modern principles of rural education and extension were drawn upon freely by all these projects. Moreover, recent developments in crop fertilization, pest control, seed selection, use of DDT, and other up-to-date techniques were applied to good advantage within the framework of a policy of gradual development. Nevertheless it is characteristic that the organizers and leaders we have met so far in these pages uniformly avoided using, on an extensive scale, many of the up-to-date appliances which to us in the West are household words. Modern farm machinery, especially the heavier types, is a good example. The reader will have noticed that its use was seldom recommended in any of the areas where such equipment is hard to obtain and expensive while labor is plentiful, where the farm plots

are small and the farmer's cash income is pitifully low. Other examples could be cited, but one is sufficient for the purpose of our discussion. What I wish to stress is that we have seen few attempts to draw unhesitatingly on the latest scientific and industrial innovations of the Western world in the hope of finding a quick solution for the rural problems of the East. The leaders in charge of these projects were too wise to try short cuts, and the success of their efforts proves that the course which they chose was the right one.

On the other hand, all those who are active in the field of rural reconstruction need to be ever on the alert for advances in scientific research which may prove unexpectedly useful in unusual situations. One particular instance where the latest in modern science was called upon to good advantage is worth recording in these pages, and it is presented in the hope that the story of the enterprise may suggest other suitable possibilities of a similar nature.

The scene is set once more in Greece; the time is the period immediately following the last war, and the device employed in this piece of rural reconstruction is the science of artificial insemination of livestock.

The facts are quickly stated. At the end of World War II the livestock population of Greece was found to be greatly depleted. The Near East Foundation, committed to a policy of assisting in the rehabilitation of Greece and interested especially in rural affairs, decided to concern itself specifically with the problem. Artificial insemination was suggested as one possible means of getting the quick results which the situation demanded. The suggestion was thoroughly explored, a plan was developed, and eventually a service was inaugurated. From a handful of high-quality purebred bulls, shipped from the States, the necessary semen was produced for an extensive breeding program, and within a few years thousands of native cows had been inseminated. The vigorous product of this breeding project soon appeared in large numbers, and life-giving milk began to flow to the underfed population at a rapidly increasing rate.

It is not my intention here to explain how one goes about setting

up a program of artificial insemination. That is a job for the experts. But it should be of interest to examine more closely how the project in Greece operated and the vital contribution it made to the general rehabilitation of the country.

Extensive information on all manner of subjects had been brought out of Greece by the Allied intelligence services during the last months of the war. Included was the alarming news that the livestock population of the country was greatly reduced, probably by at least 40 or 50 per cent, and the depletion became even more serious later as a result of civil strife. It was obvious that plans for the eventual reconstruction of Greece must contain, as a major item, adequate provision for the rapid replacement of livestock, particularly cattle. In the vicinity of Athens there are numerous dairies which supply the metropolis with milk. In the provinces every village has a herd. A cow from one of these herds is used by her peasant owner for a variety of purposes—she provides him with milk, draft power, and eventually meat. Without cows to draw his plows and crude harrows the farmer cannot produce the cereals and other food crops that are so urgently needed. A shortage of cows in Greece consequently has serious effects on the entire agricultural economy.

Towards the end of the war the Board of Directors of the Near East Foundation and its Program Committee began to make preparations for the day when the work of rehabilitation in Greece could begin. In formulating their plans the livestock situation was given careful consideration, and it was inevitable that the comparatively new science of artificial insemination should sooner or later come up for discussion.

It is not entirely correct, of course, to refer to artificial insemination as a new science. Actually it is a method of animal breeding which has been known and occasionally practiced since ancient times. Soon after the turn of the century, Czarist Russia did some research on the subject, and in the late 1930's artificial insemination began to be more widely applied in America, partly, without doubt, as a result of certain recent developments in chemistry, physics, and biology. A few states such as New Jersey, New York, and Wis-

consin promoted and popularized its use among progressive dairy farmers.

The question of the possible use of artificial insemination in Greece was discussed by Professor Lincoln D. Kelsey, one of the Foundation's advisers, with two of his Cornell University colleagues —Professor F. B. Morrison, then head of the Department of Animal Husbandry, and Professor Glenn Salisbury, who was in charge of the insemination work. These two experts were greatly interested in the idea, for it offered an opportunity to try out a developing science under unique and probably adverse conditions. It was an exciting challenge. But both Morrison and Salisbury were practical men, and they refused to let their enthusiasm lead them astray. The matter required careful thought.

Before proceeding further, the whole proposition was thoroughly explored from every angle. However, the longer the project was considered the more feasible it seemed to be, at least as a practical experiment. The final result of all this careful study was an informal agreement between Cornell University and the Near East Foundation to cooperate in a project of cattle improvement in Greece through artificial insemination. Cornell University through its experts would supply the know-how, suggest the procedure, list the necessary supplies and equipment, and find the workers. The Near East Foundation would provide the funds and administer the program.

The necessary equipment was assembled in spite of wartime shortages and restrictions. The Church of the Brethren gave six of the finest bulls to be found in America. Cornell University sent one of its ablest young scientists, Irvine Elliott, who had just received his doctor's degree, to organize and direct the program, and Mathias Dietrick, an experienced inseminator from Ohio, was secured as Dr. Elliott's teammate. Mat Dietrick had worked previously for one of the big cooperatives organized by Ohio State University's College of Agriculture and the dairy farmers of Ohio.

Much thought and painstaking effort went into the initial preparations. Everyone was aware of the fact that even in the case of so highly specialized a science as artificial insemination normal pro-

cedures would have to be modified to meet local conditions in Greece. Fortunately the Foundation had advisers, Greek as well as American, who were thoroughly familiar with the situation in Greece and were thus able to indicate what improvisations would have to be made. Even the equipment to be used was affected by environmental factors. It was decided, for instance, that a kerosene-operated refrigerator would be much more practical in Greece than an electric machine. An oilstove would be used to heat water instead of an electric sterilizer. Instruments would be sterilized by being boiled on a kerosene stove and then dried in the oven of this stove.

When improving the livestock of underdeveloped areas, many experts prefer to build on a good strain of native animals if such can be found. Diligent search, they argue, will usually disclose a number of surprisingly good types. Then through a systematic program of breeding and selection great improvement can in time be brought about. Moreover, the resulting upgraded stock is usually well adapted to its environment. Experience has shown that the relatively delicate, pure-blooded, high-producing breeds of Western cattle, when shipped to less favored parts of the world, are apt to die of starvation on the meager pastures or succumb to local diseases to which they are not immune. However, through artificial breeding it is possible to speed up the whole process of reproduction and, what is even more important, to use the best available type of pure-bred sires for the purpose.

With artificial insemination one male animal is capable of siring each year from five hundred to five thousand offspring instead of the usual fifty or so. Thus a sizable program of livestock improvement requires but a small number of bulls. These valuable animals, given the best of food, care, and protection, can be kept at a central station, and from there the semen is sent out. The offspring should inherit from their mothers the ability to survive under adverse conditions and from their fathers better body conformation and higher productivity.

The selection of suitable bulls for the Greek program obviously received the most careful attention, particularly the breed which

was to be used. Fortunately the Cornell advisers had a large amount of information on the subject. It appeared that the metabolism of the Brown Swiss was such as to enable this breed to stand hot climates much better than some of the other well-developed types. Furthermore, the Brown Swiss originated in central Europe under conditions not entirely unlike those in Greece. Finally, the mature animal is of medium size and when mated with the native cow of Greece should, it was thought, produce a breed capable of fulfilling the various functions which a cow in that country fulfills. For these and other reasons the Cornell authorities advised the use of Brown Swiss. The cooperative leaders of the Church of the Brethren, who had agreed to provide the bulls, readily complied with these specific instructions.

When in October of 1944 the last Germans fled from Greece, first the Office of Foreign Relief and Rehabilitation Administration and then UNRRA were ready with their ambitious programs. Private agencies, too, made preparations to give aid as soon as possible, and one of the first of these to enter—or rather to return to—Greece was the Near East Foundation. It was still too early to embark on long-range improvements, but in order to be ready for the day when constructive activities could be started, Dr. Elliott had proceeded to Cairo in November, a few weeks after the liberation of Greece. There at the headquarters of UNRRA he was able to gather much valuable information which helped in the future design of his program.

In March, 1945, Dr. Elliott went to Greece, and the following month he was joined by Mat Dietrick. They were an unusual team —these two young men who pioneered in this project. Elliott the scientist, with a Ph.D. from Cornell, was mature beyond his twenty-nine years both in judgment and in general appearance. Good-natured, smiling Mat Dietrick, six feet five inches tall, was extremely boyish in appearance though he was twenty-nine also and the father of three children.

Quietly and patiently they began to piece together the structure of their program. Adaptable by nature, they quickly adjusted themselves to the Greek situation. They won the respect and confidence

of the Greek farmer through their sympathetic and understanding approach. All farmers seem to be much the same whether they happen to till the soil of historic Greece or work the most productive fields of America; and both Elliott and Dietrick knew and respected farmers.

After thoroughly exploring the situation they decided to establish their headquarters at the College of Agriculture near Athens. Here the necessary laboratory was set up and a suitable stable prepared for the bulls. Not only was this an appropriate location for the work to be done, but it was also close enough to Athens to be under the eyes of the Ministry of Agriculture. A demonstration is of little value if it is hidden from the sight of those who must eventually carry on the work.

In June the six bulls arrived, after one of the most unusual journeys ever undergone by ordinary farm animals. From their comfortable Pennsylvania stables they had traveled by train to St. John, New Brunswick, from there by a neutral Swedish ship to the Port of Patras on the west coast of Greece. At Patras they were loaded on waiting trucks and transported over the war-torn roads of Greece to their new home in Athens. It was quite a trip for a sextet of young bulls and one not without humorous and hair-raising adventures.

As soon as the animals had recovered from their arduous travels, they were rechristened and given names appropriate to their new surroundings, with the famous mountains of Greece providing the inspiration. Thus Forest Farms Duke became "Olympus," Molly's John of Lee's Hill "Parnassos," and Orangeville Bell Boy was renamed "Hymettos." The three others soon learned to answer to "Taiyetos," "Pindos," and "Parnon." The idea of renaming the beasts was a happy thought, and it pleased the admiring stable hands who took care of them. Besides, they were worthy bearers of such historic names, for they represented some of the finest blood of their breed.

The equipment that had been purchased and assembled more than a year before arrived shortly after the bulls, in July, and now the insemination laboratory could be set up. Occupying neat quarters

at the livestock end of the College of Agriculture and with a few essential improvisations, it was the pride and joy of Elliott and Dietrick when completed. The reconstructed stable for the bulls and the special breeding rack were only a few yards away.

While setting up their headquarters the two experts were trying to decide how the program should actually function. They quickly perceived that the procedure normally followed in the United States would be utterly impractical in Greece. In the States the whole system leans heavily on the rural telephone system. Through this service the technician at his headquarters keeps in daily contact with the farmers of his community. He knows exactly what farmers have cattle to be bred on a particular day and how many there will be in each herd. The inseminator is also in constant touch with the station where the sires are stabled. It may be hundreds of miles away, probably at the farm of the State College. From there the necessary amount of semen is regularly mailed to the inseminator at his county or regional office. Thus supplied with fresh semen, he visits the several herds requiring the service.

In Greece communication facilities are limited. A rural community is fortunate if it has one telephone in the whole village. Therefore a new system, adjusted to local conditions, had to be worked out. But there was no reason to wait for a full plan to be perfected before launching the program. Elliott and Dietrick decided to go ahead and make a start, and they selected the village of Aspropyrgus for their initial adventure. Aspropyrgus, with a population of about twenty-five hundred, lies fifteen miles from Athens near ancient Eleusis. Because of its proximity to the metropolis it had a number of dairies. There were two dairy cooperatives, divided, it is true, by serious political differences but both essentially interested in the production and marketing of milk. Only a mile or so away a good hard-surfaced road ran direct to the city. For these and other reasons Aspropyrgus seemed a good place to start, and here, on the twentieth of August, the first cows were bred.

The American experts had not even waited to train workers. That could be done later. Dietrick was himself a skilled operator, and he wanted to become familiar with the situation at first hand.

Moreover, he felt that this was a good way to demonstrate to the inhabitants of the village how a practical American with a college degree uses his education. Here was a new profession for certain young Greeks if their interest could be effectively aroused.

The dairymen of Aspropyrgus were naturally skeptical but not abnormally so. Like most hardheaded farmers, they were not permitting themselves to be taken in by newfangled ideas. However, with a few public meetings to explain the new system and a little propaganda on the practical benefits of artificial insemination, they were soon sufficiently convinced to apply for the service. They were of course influenced in their decision by the fact that good bulls were exceedingly scarce, and they were faced with the necessity of maintaining their herds. If this new method was as good as these Americans claimed, it was at least worth a try.

Thus the program began. From his headquarters at the college Dietrick would go out to Aspropyrgus in his jeep at a prearranged hour, carrying with him a supply of semen from the Brown Swiss bulls. At the village he used as his laboratory a makeshift stable belonging to one of the cooperatives. The peasants, mostly women, waited with their cows in the adjoining yard. One by one the animals were brought in and quickly inseminated. Before long Dietrick was breeding a dozen or more cows on every trip.

While Mat Dietrick was pioneering in the field, Dr. Elliott gave his attention to the training of Greek inseminators. Thirteen young men were given a short, intensive course of preliminary instruction, and five of the best of them were later retained as members of the new staff.

By the time these young recruits were ready to go to work in the latter part of September, Elliott and Dietrick had figured out a "system" suitable for Greece. Subsequently, as time went on, the program was improved in various details, but the basic procedure that was decided upon in those early days never had to be radically changed.

The plan the two experts had evolved worked as follows. A so-called breeding route was established which took in several villages, perhaps three or four or possibly more, the actual number of places



A Greek farmer studying a live sperm cell through the microscope.



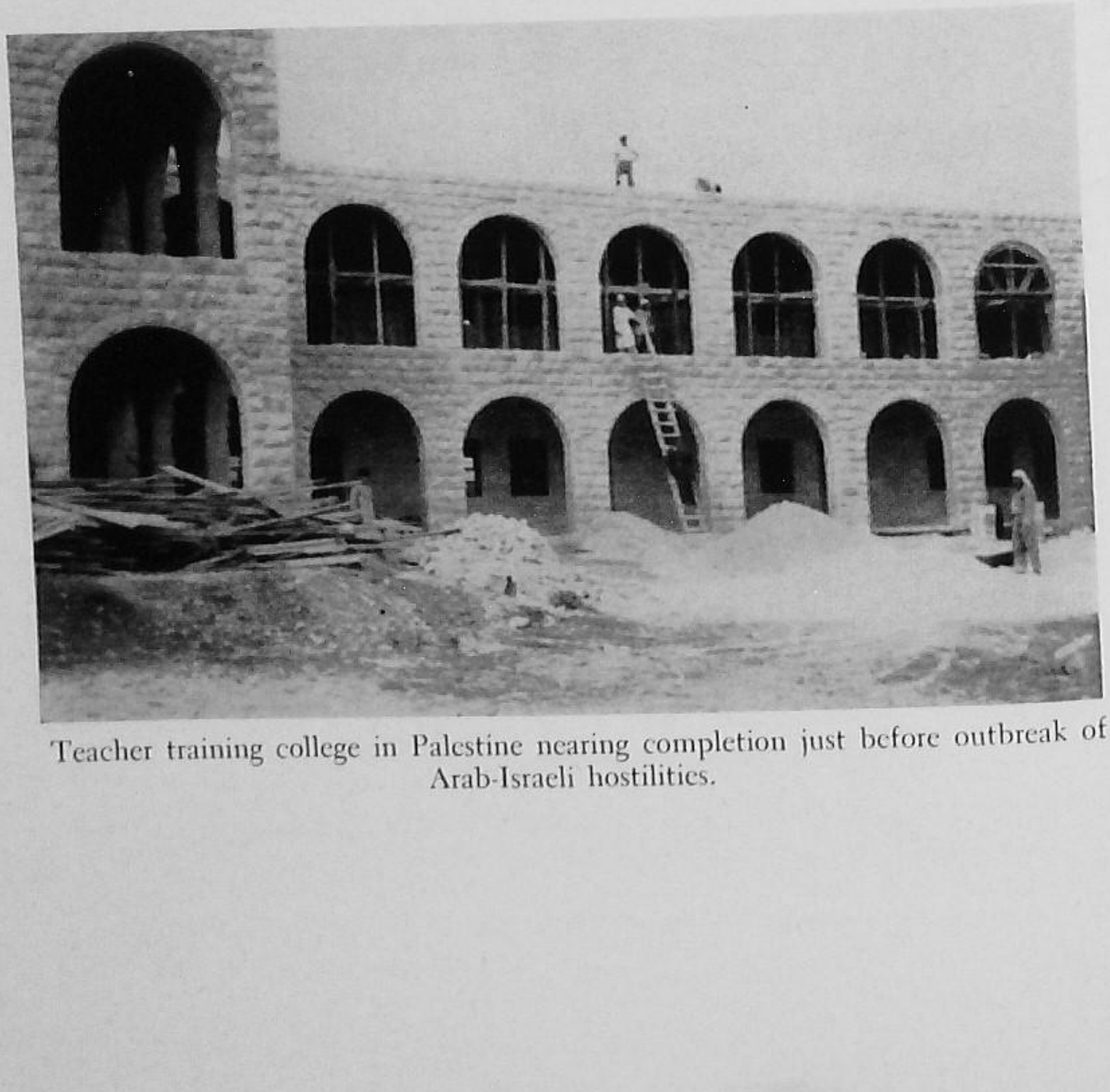
"Parnon" at two and a half years of age. Within the space of a few years Parnon sired several thousand offspring in Greece.



At the end of their two-week course in artificial insemination. Twelve of these graduates won certificates entitling them to Government employment.



Village schoolmasters enrolled for the special one-year course at Tulkarm.



Teacher training college in Palestine nearing completion just before outbreak of Arab-Israeli hostilities.

on a given route being determined by the roads, the distances involved, and the size of the community herd at each stop on the way. An inseminator would start out each morning in his jeep with a supply of processed semen in suitable containers. He covered his route in much the same way as a rural mail carrier, always in the same direction and according to a definite schedule. The peasants knew exactly at what hour the inseminator would arrive in the village and about how long he would stay. Those having cows to be bred on that day would assemble in the yard outside the stable which was used for this purpose. The scheme worked perfectly. Very soon after the inauguration of the program in Aspropyrgus four neighboring villages asked to be included, and it was not long before eleven rural settlements in the region were participating in the program, with three separate routes operating daily from the headquarters at the college to cover the territory. During the first year of operation 2,289 cows were bred, and in the second year this total was more than doubled.

From the start the original plan had allowed for the eventual establishment of another breeding center in Macedonia. However, it was felt to be important to gain some experience in the Athens area before attempting a further expansion of the program. By the beginning of the following calendar year, 1946, sufficient experience had been gained to consider taking this step, and preliminary to it a careful study was made of the farming situation and particularly the method of raising livestock in that northern area of Greece.

The livestock industry of Macedonia presented a different picture from the comparatively specialized business of dairying around Athens. The Macedonian cattle were less improved. They were kept in community herds, and several bulls, mostly yearlings, frequently ran with the herd. The cattle population was more widely dispersed over the area, thus requiring much more travel to inseminate the same number of animals. The breeding was more seasonal than was the case in the Athens area. But all these factors only added to the challenge of pioneering in a field comparatively new even in America, and the preliminary explorations in Macedonia soon led to

the establishment of a laboratory and stable at the university farm eight miles east of Salonica. The actual work of breeding began in May of that year, and at about the same time fifteen young men were selected for an intensive two weeks' course of training in artificial insemination. Six of them quickly proved their worth and consequently were kept as permanent members of the staff to be trained on the job as skilled inseminators.

Because of shipping problems and various other difficulties it was not possible at this time to secure from the Church of the Brethren another set of purebred bulls for Macedonia. However, Dietrick and Elliott managed to get ten Brown Swiss bulls which UNRRA had brought over in their shipment of livestock. These animals were not hand picked, as had been the case with the first batch sent over to Athens. Furthermore, some of their pedigree records had been lost or mislaid; but the UNRRA bulls were purebred and certainly far superior to anything to be found in Greece under postwar conditions.

Soon three breeding routes covering about forty Macedonian villages were in operation. As in Attica, all the inseminators covered their routes by jeep, that is, all except one.

As an experiment in utilizing the available forms of transportation and in order to cover a wider area, Mat Dietrick, who had taken charge of the Macedonian sector, tried out a new plan. He made a daily shipment of semen by bus to Edessa, about sixty-five miles away from the laboratory. At Edessa the vital material was delivered to an inseminator who covered his route of four villages by horse and cart. The experiment worked well for about three months, until the seasonal drop in breeding made it impractical to continue with it. By the following spring, when it was time to reopen the service and further test out its efficiency, the guerrilla war had spread to the Edessa section, making any activity of this kind impossible.

The insemination program in the Macedonia sector did not expand in a spectacular manner, but developed steadily along sound lines, and it soon became apparent that in certain respects the services were more urgently needed here than in the Attica region.

During the first year of operation fewer than two thousand cows were bred, but in the first month of the second year the number jumped to six hundred. The total for the second twelve months reached about thirty-five hundred.

These are the bare outlines of the program. However, there were other aspects of the whole undertaking as important as anything so far mentioned and fully as interesting. One of these features was a clinical service which was added soon after the breeding work started. Still another activity was the monthly news letter that was sent out to cooperating farmers.

It had been recognized from the start that the technical staff should include, in addition to the regular inseminators, one or more well-trained veterinarians, and in time two excellent men were engaged in that capacity for the Attica program and one for the Macedonian unit.

In this matter of a clinical service to be operated side by side with the insemination service, the project was greatly indebted to the help and guidance of two able veterinarians—Dr. Karantounias and Dr. Kaplan.

Dr. Karantounias, the veterinarian of the livestock section of the Ministry of Agriculture in Athens, was assigned by the Ministry to the project and soon came to be a sort of liaison officer between the Near East Foundation and the Greek Government. When his outstanding ability and interest became fully apparent, he began to be regarded as the future project director who would ultimately take over in Greece after the departure of the American specialists.

Dr. Kaplan, the young man who had accompanied the bulls on their trip across the Atlantic, was a veterinarian in the livestock section of UNRRA. While guarding his valuable and sometimes unruly charges, Dr. Kaplan had plenty of time to become acquainted with the American agency to which these animals were consigned. After completion of his mission he continued to take a friendly interest and to cooperate closely with the Foundation's livestock improvement project. It was he who continually emphasized the importance of a clinical service to supplement the day by day job of cattle breeding.

Large numbers of cows brought to the village stations for insemination were suffering from genital disturbances, and this condition demanded urgent attention in a country such as Greece where one animal is so important a part of a farmer's total assets. There was also the problem of sterility which was comparatively widespread. The condition was due in part to the unusual accumulation of such animals during the war and occupation years. Since replacements were unavailable or too expensive, sterile cows had been kept in the hope that they might possibly breed again. Finally, there was the problem of the early diagnosis of pregnancy which the experts say is more important in connection with artificial insemination than it is with natural breeding. And in Greece, particularly in Macedonia where community herds were customary, it was of still greater importance. All these problems and others, directly or indirectly related to breeding, urgently called for some sort of clinical service.

Dr. Kaplan provided valuable counsel in all these "medical" matters, and the staff acted on his suggestions. Once a week the Greek veterinarian replaced the regular inseminator who would have the day off. The doctor covered the usual route, inseminating the cattle brought in for the purpose. But he also examined the sick animals, diagnosed their ailments, and prescribed appropriate treatments. A study of the figures at the end of the first year of the clinical service indicated that less than 3 per cent of the sick cows examined were diagnosed as incurable; the other 97 per cent had been brought back to health and production as a result of the treatments prescribed. Included in the latter group were a number of cows that had failed to breed for some time. It would be hard to overestimate the economic value of this service among a people and in a land with such limited resources.

Not many months after the start of the program Elliott and Dietrick found themselves with a serious clinical case of their own. Hymettos, the youngest and best bull of the six, developed a high fever. Dr. Kaplan was called in. He made a careful diagnosis and finally announced that a "foreign body" was causing the difficulty. Bovines are not at all selective in their eating and will often swallow

large and dangerous objects which happen to get mixed in with their feed. Hymettos had the same failing and was now suffering for it. Surgery was recommended as the only hope of saving his life.

In an operation lasting three hours and performed before a large and sympathetic audience, Dr. Kaplan located and eliminated the cause of the trouble. A piece of wire had penetrated the wall of the stomach in the direction of the diaphragm and toward the heart and lungs. Another section of wire and a piece of glass were found lying loose in the stomach. All these foreign bodies were carefully and successfully removed. As the drugged and docile patient was sewed up, the tense group of onlookers emitted an audible sigh of relief. Hymettos soon regained his health, and he continued to be one of the most dependable of sires. Incidentally, Hymettos sired the program's first offspring, born on May 30, 1946.

We turn now to another undertaking, the monthly newssheet, which became an important side-line activity. Not all the farmers knew how to read, but most of them did or at least one member of the family usually was able to. Written in the simplest language, the monthly bulletin summarized the progress of the insemination work, discussed timely topics, such as feeding or caring for the calves, handling the cow at calving time, and similar subjects. All in all the monthly bulletin exerted a considerable influence, and it is not difficult to understand the reason when one realizes the size of the area that was served by this comparatively modest demonstration.

On June 30, 1947, only twenty-three months after the start of operations in Attica and fourteen months after the start in Macedonia, 3,259 farmers were participating in the program. With their families this group must have represented twelve or fifteen thousand people, not an insignificant number to be assisted economically or influenced educationally through the project's various activities, including the little newssheet. In passing it might be mentioned that these farmers owned 13,816 cows of which, on the date given above, 9,027 had been bred by artificial insemination. Calves to the number of 2,300 had already been produced as a result, and 2,215

animals had been treated at the clinics, not counting those brought in for pregnancy diagnosis.

During the summer of 1946 Dr. Salisbury, who it will be recalled was one of the project's advisers from Cornell University, paid a visit of inspection to Greece. The work had then been in progress for just about a year, and it was time for an objective appraisal by a competent authority from the outside of the results achieved. Dr. Elliott and Mat Dietrick had been on the job long enough to profit from Dr. Salisbury's counsel, and at the same time they had had sufficient experience to object with authority should any of his suggestions happen to be impractical under local conditions.

For Dr. Salisbury the visit was also a very interesting one, since he was able to see this new science, with which he himself was so closely connected, applied under conditions more adverse than any it had encountered even in its earliest days in the States. He was able to make several exceedingly helpful suggestions, and he derived no little satisfaction from finding the work progressing so well under these unique and difficult circumstances. His satisfaction communicated itself to Elliott and Dietrick and gave them a feeling of pride and renewed enthusiasm for their job. The first milestone had been reached and safely passed.

I myself was able to pay two visits to the Greek insemination project, the first at the time when the work was just getting under way around Athens and when the extension into Macedonia was being seriously considered, the second late in 1947, when the program had grown in both areas into a routine service greatly valued by thousands of farmers. On my second visit I covered all breeding routes, both in Attica and in Macedonia, and saw at first hand, as no report could portray, the very great value of this service to the community. Mine, of course, was not a technical inspection, but only that of a layman, and yet I was deeply impressed by the economic and educational contributions of the project as I saw the peasants bring their animals to the station for breeding, for clinical treatment, and occasionally for injections of a new hormone which causes sterile animals to conceive. I was amazed to observe how thoroughly these people managed to understand some of the rather

technical phases of the service and how much they appreciated it.

On one of the routes I saw a pair of fine heifer twins brought into the stable by a woman from Aspropyrgus. I was told that these beautiful animals were among the first products of the insemination program. They were now about a year and a half old and had themselves been inseminated a few months before. However, there seemed to be signs that the animals had not conceived and the owner was worried. She had brought them on the day the veterinarian was making his rounds, and it so happened that I had come along on that trip. The doctor expertly examined the animals and then told the woman not to worry; her heifers were with calf and would eventually bring forth offspring even finer perhaps than their mothers seemed to be. As I saw this thrifty peasant woman leave the stable with such a pleased expression on her lined face, I realized more than ever how valuable a possession a farm animal is to a peasant.

Another farmer, in this case a man, brought in a cow that had been at the station several times before. He insisted that it still showed no signs of having been bred. The doctor examined the animal, and he was forced to confirm the owner's opinion. He immediately injected into the shoulder of the cow several c.c.'s of the new hormone. The whole business took hardly more than two or three minutes, the injection itself not more than a few seconds, but the old peasant as he left, leading his cow homeward, had a broad grin on his face.

I asked the veterinarian if this unlettered man had any real grasp of the situation, and he replied that I need have no doubts about that. The farmers understood every aspect of the work, including a lot of the technicalities. The doctor went on to say that this man had even been aware of the fact that he was not to bring his cow back for insemination at the first sign that the hormone was working, but only at the time of the second indication. He had cautioned the man, but found that his reminder had not been necessary.

Most of the local people I met seemed to understand all these various details, and they were obviously pleased to be able to make use of the program. One good proof was their willingness to

pay for its services. Like all other Near East Foundation activities, the insemination service was in no way a charity project. It was intended to be one more educational demonstration in helping underprivileged people to help themselves. The fee for insemination was originally fixed at 2,000 drachmas for each first service. If an animal had to be brought back, there was no extra charge. When the program was well established and its value fully understood, the charge was raised to 10,000 drachmas, which was roughly equivalent, at that time, to two American dollars. This was about half the normal charge in Greece for natural breeding, and it more or less covered the cost of the transportation.

My visit to the northern province of Macedonia was timed to coincide with an exhibit at Salonica of the first products of the program. Mat Dietrick would have much preferred a series of small exhibits right out in the villages where all the cooperating farmers could participate easily and be sure to attend. However, the Government officials wanted something bigger and more impressive, and they had their way, with Dietrick's loyal staff working hard to make the exhibit a great success.

The Salonica Y.M.C.A., always ready to cooperate with the Foundation's rural programs, turned over its big athletic field to be used as a show ring. On my arrival I was surprised to discover that the fine swimming pool, which I had seen in process of construction several years before the war, now served a totally different purpose. It was used on this occasion to stable the bulls that were also being displayed to the public together with the young animals exhibited by their owners. In the war, when the Germans occupied Salonica, they requisitioned all public buildings, including the Y.M.C.A. The big swimming pool, with one side torn out to provide a convenient entrance, was used to house horses and mules of the German army. And so, on this occasion, the Y.M.C.A. considered it no sacrilege to use its swimming pool as a stable for a set of magnificent bulls and their prize offspring, but rather as a symbol of the resurgence of Greece.

About one hundred fifty young animals, all products of the breeding program in Macedonia, were brought in by truck from the sur-

rounding villages. There were already many more of these calves in the area, but this number was all that could be conveniently transported. The animals made a fine showing, and their owners were exceedingly proud. The City of Salonica, the Ministry of Agriculture, the Agricultural Bank, and various cooperatives joined together in providing a substantial fund for the numerous prizes. The awards were presented on the second day in the midst of much speechmaking, which included a fine tribute from the Minister of Agriculture himself who had come up from Athens to attend the exhibit.

Later, when we circulated among the animals to take snapshots of some of the winners and their picturesque owners, everyone wanted photographs taken. One kindly old peasant insisted that I take a picture of his prize heifer together with his twelve-year-old daughter. On my trips around the villages, days after the exhibit, I would see here and there along the routes prize-winning heifers and young bulls still wearing proudly the distinctive ribbons of their class award.

After my return to the States from this visit to Greece, I read the reports from the field with new interest and understanding. During 1948 the calves began to arrive in ever-increasing numbers, and it was decided to celebrate the arrival of the five-thousandth offspring with an appropriate announcement sent out to the contributors who had so generously supported the project. However, before the necessary exchange of correspondence with Athens could take place and suitable arrangements be made, the number of newborn animals had so far exceeded five thousand that the whole point of the matter was lost and the plan had to be dropped.

By the end of 1948, after about three and a quarter years of activity at the Attica station and two years and a half at the one in Macedonia, the program had resulted in the breeding of 23,513 cows. With conditions in Greece continuing so unsettled, it was impossible to keep an accurate record of the offspring, but the number by this time stood at approximately 13,000. In a country that had lost so much of its livestock during the occupation and postwar years, these figures represented a tremendous contribution to the

long, slow process of reconstruction. Yet it was by no means the whole story. In many areas, particularly in Macedonia, had it not been for the insemination project much of this breeding would not have taken place at all, or only after great delay, because mature male animals were frequently unavailable. Furthermore, as even most laymen know, a cow does not produce milk unless it periodically comes with calf, "freshens" as the farmers say. Consequently the insemination program was directly responsible for a continuing supply of health-giving milk with incalculable beneficial effects for the entire population.

And what about the quality of the new stock? The first generation certainly bears proud witness, with sleek coats, fine body conformation, and vigorous growth, to its purebred pedigreed sires. But this is not all. The young animals show every sign of being able to meet the final test of improvement found in production. A number of the first-generation heifers have had calves of their own and are now giving milk. The ability in young cows to produce cannot be compared to that of their dams, even when the latter are rather poor or mediocre in quality. Comparisons, to have meaning, must be made between mature cows. However, there are formulas which are frequently used by practical dairymen in estimating the production capacity of animals upon reaching the fullness of maturity. On the basis of such a method of prognostication, the products of this breeding program show fine promise for the future. These studies also show that the effects of the pedigreed sires are more noticeable among the village herds of Macedonia than is the case with the more specialized dairies of the Athens area where fairly good producers have always been kept.

Dr. Elliott and Mat Dietrick were eventually replaced by another director, John Halpin of the Onondaga Breeders Association of New York State. Dr. Elliott remained in Greece for almost two years until the program was thoroughly established and he could return to his professional career in America. After his departure, Mat Dietrick assumed direction of the whole program and continued to lead it until the end of 1947 when he, too, had to return to the States. At this critical point, when the future of the project seemed

to be in jeopardy, John Halpin was engaged to administer the work. He proved to be as capable as his predecessors and particularly well suited to head the program at the later stage in its history.

Halpin emphasized more and more the educational possibilities inherent in the project. The clinical service and the monthly newssheet were typical examples of this kind of activity. But the people who had benefited so directly and so concretely from the breeding service were ready and willing to accept much more in the way of an educational program. Insemination work, therefore, served as a logical starting point for many expanding interests in agricultural extension, home improvement, child care, and sanitation. It was along these lines that Halpin expanded his activities, his only limitation, and that indeed a serious one, being the lack of sufficient funds.

In 1950 the demonstration reached the stage where it could be turned over to the Ministry of Agriculture to be operated as a continuing rural service of the Government. This important step was successfully negotiated, and thereafter the Near East Foundation had only an advisory relationship to the project.

Back in August, 1945, when the first breeding station was ready to begin functioning in the College of Agriculture near Athens, the Orthodox Church was requested to give its blessing to the new project. This was a custom of the country which the Foundation was always careful to observe. Bishop Pantelemon was assigned to perform the ceremony and make a few appropriate remarks. After His Grace had blessed the enterprise according to the ritual of his church, he made a brief speech. The Bishop had officiated that morning at a memorial service for those who had given their lives in the bitter fight for liberation. Now in the afternoon of the same day he was speaking before two hundred simple farmers who had gathered together curiously and hopefully to participate in a rather unusual function.

Bishop Pantelemon opened his remarks with these words: "I have come from the presence of death to consecrate a source of new life for Greece." Then, with a look of satisfaction and triumph, he walked without concern among the stamping, snorting bulls and

sprinkled them with the holy water of benediction. This done, he continued his speech.

As we review the achievements of this experiment in rural reconstruction after only a few years of activity, the words of Bishop Pantelemon take on a new and prophetic meaning.

[CHAPTER X]

Develop Capable Leaders

A MAJOR objective of all well-conceived demonstrations in rural improvement is eventual integration of the services provided and the methodology developed into the educational framework of a particular country. If this goal is to be achieved, however, skilled workers and leaders must be produced by the demonstration itself. Thus the training of young men and young women in various phases of rural community development is a main issue and not merely an important side line. In certain respects, it is a responsibility that takes precedence over all other considerations. Thoughtful and systematic effort must be devoted to the task, and adequate provision for this aspect of the program must be made in the budget.

The job of turning out good rural leaders presents a number of problems, which are partly due to the fact that traditional training procedures cannot always be applied in retarded areas, at least not without considerable modification. Some of these problems have been indicated in previous chapters, but the reader may find it useful to review once more the principal factors involved.

There is, first of all, the wide gulf, which exists in many parts of the world and particularly in the East, between the rich and the poor, urban people and rural, the educated and the uneducated. The privileged usually find it difficult to comprehend the needs and the thoughts of those who come from the other side of the street. This imposes certain restrictions on the selection of staff and makes more difficult the process of training.

Then there is the scarcity of schools, including frequently the complete lack of secondary grades, which is characteristic of many

underdeveloped countries, with the result that young people from rural districts seldom qualify for advanced training in such fields as agriculture, sanitation, or home economics even when they have the desire to take such training. Now and then an educated youth from the privileged classes has a deep sense of social consciousness and a desire to engage in rural service. But he must be unusually determined and persevering because he must clear difficult hurdles before he can make himself efficient as a worker and acceptable to the conservative peasant. Village youths who have been fortunate enough to secure a good education rarely want to return to the environment in which they were reared. Yet if one were to wait for these personnel problems to be solved, few rural improvement programs would ever get started. The leaders required must be provided in some other way.

In point of fact, it is possible to surmount all these and similar barriers, conduct effective programs where they are most needed, and produce out of the material at hand the skilled leadership to carry on the work. Careful search in every so-called backward area will disclose a number of people anxious to serve their country by helping to raise the level of rural life. Some will have a fair amount of education. The more intensive the search and the closer the adherence to really essential qualifications, the greater will be the number of potential leaders discovered. The problem then becomes a question of training—training in methods of disseminating useful information among those who need it and frequently also training in basic subject matter.

A few years ago I had occasion to discuss certain aspects of this question with a friend whose counsel and advice I frequently seek, Col. Daniel E. Wright, sanitation engineer, now retired after long and distinguished service with the Rockefeller Foundation. The conversation took place in Greece just after I had launched in Iran the program reviewed in Chapter I. My travels in Iran had impressed upon me the country's urgent need for men trained in sanitation to improve health conditions. In talking with Colonel Wright, I expressed myself, unwittingly, in terms of the traditional logic of Western educators as I described the over-all situation and pointed

to the need of the new demonstration and the country at large for a good supply of well-trained sanitarians.

Always quick to detect unsound reasoning or action and with characteristic good humor, my friend first led me on and then made this observation:

Considering the procedures you yourself have always so scrupulously followed, I am surprised to hear you approach this problem in this way. Of course, there is need in Iran for all the practical sanitarians you can possibly train, but the way you have stated the issue is putting the cart before the horse. The first step in the process is to establish your rural demonstration. Then at the earliest opportune time add sanitation with a practical, university-trained American engineer placed in charge of this department. His staff will consist of carefully selected young men of the country who think they would like to engage in service of this kind. Out of the program undertaken there will emerge a corps of enthusiastic hard-working sanitarians. Eventually this department as all the others will function chiefly and primarily as a center of training.

And this, the reader may recall, is exactly what happened.

This concept of training and its relation to the program is perhaps best summarized in a statement made by our old friend, Basil Mous-souros of Greece. "When pioneering in the field of rural improve-ment an effective program of work sets the pattern of training." A review of the numerous references to the training of leaders in the various projects described in this book reveals extensive application by experienced operators of this fact. The people who were re-sponsible for these demonstrations followed certain rather definite procedures in training their native understudies. These procedures are outlined in the following pattern of action:

I. Establish the demonstration.*
   A. Select a suitable area.
   B. Determine the activities to be included and the approximate order in which they are to be launched, by
      1. Gathering facts about present conditions from every available

* The items listed under this heading do not, by any means, include all the steps involved in establishing a program. The few given here are merely an introduction to the more detailed outline under II on training procedures and an indication of the relationship between program and training.

source. (Avoid detailed surveys at this stage. See page 194 for further discussion.)

2. Analyzing the data secured.
3. Setting down the immediate and long-range objectives, at least in tentative fashion.
4. Deciding on a plan of action to attain these goals.

C. Assemble the required workers for the initial activities and then add to the staff as the program expands.

D. Start operations and gradually develop a fully rounded, comprehensive demonstration.

II. Develop out of the project a corps of skilled technicians and capable directors of rural community development.

A. Consider the selection of personnel as the first important step in this process.

1. Screen large numbers of applicants.
2. Make selections on the basis of the following criteria and more or less in the order listed.

a. A desire to serve fellow men and to acquire essential training in order to render effective service.
b. Willingness to live and work in primitive rural communities.
c. Knowledge of rural life and conditions.
d. Interest in and sympathy with the problems of rural people.
e. Education—general and specific (whatever level proves to be practicable after the other requirements have been met).

(1) Raise the educational requirements as the success of the program begins to challenge the interest of young people with more education.

B. Conduct a systematic program of on-the-job training.

1. Make all supervisory visits in the field chiefly instructional.
   a. Emphasize good points of the worker's approach.
   b. Point out his weaknesses.
   c. Suggest improvements.
2. Hold periodical training conferences. (These should be well organized and, in the beginning, frequent.)
   a. Give instruction when and where needed in basic subject matter.
   b. Provide means whereby the worker can improve, if need be, his skill in performing those jobs regularly done by the villagers with whom he is dealing, such as plowing a field, milking a cow, sheep, or goat, repairing a farm implement, cooking a meal, bathing an infant.

c. Provide special instruction in
   (1) Good teaching methods. (Sound principles of pedagogy and adult education must be utilized whether a leader is attempting to induce a farmer in the field, a housewife in the home, or a group of villagers at a public meeting to adopt certain improved practices.)
   (2) The use of job analysis as a device for making all instruction more practical and specific.
   (3) The psychology of dress when dealing with peasants.
   (4) The making of farm, home, health, and community surveys.
   (5) The interpretation of the findings of such studies.
   (6) The planning of long-range programs of improvement on the basis of the information acquired.
   (7) Methods of drawing upon the knowledge, experience, and judgment of the peasant through village committees and volunteer leaders.
   (8) The use and importance of demonstrations at the farm, home, and community level.

3. Reward progress by complimenting successful workers and giving appropriate salary increases.
   a. Exercise great patience with those who show an aptitude for the work and a desire to get ahead even if their progress seems slow.
   b. Eliminate quickly and firmly those who show an attitude of superiority toward villagers, distaste for manual labor, uncooperativeness, or other clear indications of unsuitability for this type of work.

C. Eventually supplement the continuing in-service training with appropriate types of pre-service instruction as the program sets the pattern of training.
   1. Through specially organized courses operated in connection with the demonstration, or
   2. By utilizing certain of the education facilities existing in the country, perhaps with appropriate modifications tactfully arranged.
   3. By a combination of these methods.

D. Provide opportunities for the most capable of the leaders developed by the procedure outlined above for further specialized training as final preparation for key administrative positions in the demonstration or in order to assume larger responsibilities with the Government.

1. At institutions of higher learning within the country or in neighboring states.
2. At universities in Western countries which have well-developed systems of rural education and extension.
   a. Such fellowships to be rigidly controlled by the following requirements:
      (1) The trainee must be capable of doing graduate work or its equivalent. A capable, mature person thoroughly trained in the school of experience is considered to be fully qualified to meet this requirement.
      (2) The period of study, not to exceed one academic year, should be preceded and immediately followed by a month or more of field observations to supplement whatever may be provided of this nature in connection with the university training.
      (3) The trainee should be obligated to return to his former position or to similar work with larger responsibilities.

E. Assist the skilled technicians who emerge from this training program to secure positions of greater responsibility and wider influence in the service of their country.

A demonstration in rural improvement which purposefully and systematically develops skilled leadership fulfills its real mission. When this objective is achieved, the value of the program goes far beyond the benefits it bestows on those who are directly assisted in gaining a higher standard of living. The results gain permanency and are found to extend farther and farther from the center of operations like ripples from a pebble dropped into a large pool of water.

[CHAPTER XI]

Make Haste Slowly

IF one point has been stressed more than others throughout this discussion, it is the importance of the initial approach—the necessity of launching projects in rural reconstruction with studious care to insure maximum results in the shortest period of time. With the present growing realization that the time for action has come, there is frequently a demand for speedy measures to remove the causes of human suffering and unrest. The result has sometimes been ambitious schemes that aim to achieve great things in record time. This is an encouraging trend, but it is also one which may serve to defeat its own ends.

Failure to achieve reasonable objectives, thereby disappointing people who have been promised a better life, can result in a major setback. So many factors are involved in undertakings of this nature that it is only too easy to launch worth-while projects in such a manner that no permanent impact is made. When this happens, not only has the investment in that project been lost, but (and this is much more serious) a people who were already discouraged are now more distrustful than ever. It is much better to start modestly and carefully and then forge ahead with ever-increasing speed as the local participants gain faith in the program. When this procedure is followed, the results are lasting, and in a comparatively short time they exceed what was anticipated when the work was first undertaken. And so we must hasten—but slowly at first.

The men and women who were responsible for the projects described in these pages were strong exponents of this philosophy, and because they were their work was successful. They lost no time

in contributing to the economic well-being of those with whom and for whom they were working. They were quick to improve, effectively and tangibly, the conditions that needed to be dealt with. But before moving full-steam ahead, they made sure that their approach was sociologically sound. As a result, in most cases progress was surprisingly rapid. These demonstrations have already progressed far beyond the stage at which they were when this record was begun.

Starting right is of course only part of the story. But its importance warrants giving it first place in this brief summary of basic principles and procedures brought out in the earlier chapters. Many of the points listed have come to be generally accepted, but they cannot be too frequently stressed.

Every demonstration in rural improvement should be a cooperative undertaking. This applies all the way from top Government circles down to the local community and the individual villager. There are various devices for achieving such arrangements, but at the national level a formal invitation followed by a working agreement should be the starting point for even small demonstrations. Such an agreement will usually indicate the general nature of the program, its major objectives, and the contributions to be made by each party. In my opinion the share of the operating expenses to be contributed by the Government concerned need not be large in the beginning, provided that the contract anticipates an increasing proportion of Government contribution as the value of the work is demonstrated. The same is true on the individual and community level, where local participation naturally increases as the value of the service rendered becomes better understood.

In launching a demonstration it is advisable to limit the initial staff of foreign technicians to two or three people who will deal with those phases of the program that are to be undertaken first. It is unwise to begin with a full team of experts, each one of whom will naturally be anxious to get started in his field. Apart from the dangers involved in initiating too many activities at once among a people who have not had time to comprehend fully what the

project is about, there are the frustrations to the staff resulting from limited transportation and other facilities in the beginning. These limitations can be exceedingly vexatious to a sizable group of ambitious people. Included among the first working group must be one person capable of and responsible for administering the whole program as it gradually unfolds. It is he who will decide when the time is ripe for each new addition to the expanding activities. And his advice should be followed.

In the process of leading up to a total program, it is advisable to deal first with the economic side of life. An extra loaf of bread means much to people who have never had quite enough to eat. Improving health conditions, and thus releasing human energy for greater productivity, is about equal in importance to the efforts designed to better farm practices. In this connection it is well to keep in mind that in most underdeveloped areas sanitation is a major factor in the problem of health. Furthermore, the field of sanitation offers many opportunities of providing people who have limited resources with convenient and inexpensive means of improving their own lot.

In areas where custom, religion, and ancient traditions combine to keep women in the background, it is wise to win the confidence of the menfolk before undertaking aggressive measures to improve conditions in the home. Failure to follow this simple rule has been known to handicap seriously not only this phase of community development, but other aspects of a program as well. While it is important to launch with proper timing the economic and home aspects of the demonstration, other features can usually be added in whatever order seems most convenient.

The construction of a fully rounded demonstration dealing with all the essential needs of a rural community need not be a slow process if each forward step is taken as soon as the people are ready. Certainly this is a much faster way of reaching the ultimate objective than to begin with a number of activities only to discover later that the villagers are confused and that the program is making little headway. When, with proper organization, all the basic elements have been incorporated, it is necessary to make sure that the

various features of the program are fully coordinated and properly integrated. Several departments operating independently of one another can seriously hinder the progress of all.

Detailed surveys should be postponed until the field workers, both native and foreign, are fully accepted by the villagers as members of their community. Sufficient basic knowledge and practical information is always at hand to make a good start. The program to be operated will supply a further source of information. Then before long, when the confidence of the people has been won, it will be possible to ask the most intimate questions and to assemble a multitude of facts which will lead to refinements in the work and provide appropriate yardsticks for measuring progress.

It may sound trite to suggest that we must start with the existing situation and with the resources locally available when organizing these projects. But this point is still at times overlooked. Before we can hope to advise others wisely, we must understand why they do things the way they do; usually there is a reason. It behooves us to make use of the wisdom and intelligence that are at hand because these are assets of considerable importance, even among people who are illiterate. Moreover, in many places there are schools, churches, and mosques, and the accepted leaders of these indigenous institutions should serve as additional sources of counsel and advice. Those who help in designing a long-range program of rural improvement will usually assist in the execution of the plan.

When selecting a field staff, remember that a knowledge of rural life, sympathy with rural people, and willingness to serve in out-of-the way places take precedence over formal education as essential qualifications. The salaries paid should be considered an investment in training, much of which will return good dividends though some will be lost. Turning out skilled workers in the various fields must become one of the major objectives if the demonstration is to have an ever-widening influence and lasting effect.

As the program progresses and good leaders emerge, increasing attention must be given to insuring that the services introduced will be permanent. By this time the villagers should have become active and enthusiastic participants. In view of the importance of agricul-

ture to the economy of most countries, it is imperative that farmers should constantly improve their practices. The provision of technical assistance for farmers and their families through appropriate systems of extension and rural education is generally considered one of the responsibilities of the modern state. After having demonstrated how this can be done with beneficial results, those in charge of such projects may find it necessary to work energetically for the reorganization of certain ministries and to help draft legislation to further such reorganization.

In most retarded areas some form of extension education is the best means of providing rural youth with practical instruction in farming or home economics. If training of an institutional character seems necessary, it is important to make sure that the instruction given is vocationally sound. Considerable modification of traditional procedures may be required. Courses at school should be supplemented by a systematic follow-up program at the homes of graduates.

The elementary school is frequently the only educational facility to be found in the rural community. It should, therefore, reflect the environment from which the pupils come and in which the majority will remain. A village school that does this achieves vitality, makes its training more educational in the truest sense of the word, and holds greater interest for children. Above and beyond all this, the rural school can be made to serve the needs of the whole community and become the channel through which much of the extension service will function most effectively.

While adhering to the basic policy of introducing only those improvements that are within the reach of the people concerned and of relating programs to the resources and cultural patterns of the community, we should not lose sight of the fact that there are cases where the very latest in scientific innovations can contribute a great deal to the rapid economic improvement of underdeveloped areas.

Throughout this book the problem of rural reconstruction has been approached through the medium of the small demonstration or the so-called pilot project. This method has much in its favor,

when properly administered, since it has the advantage of making a maximum impact at a minimum expense. And for most organizations the cost factor is a serious matter. But it is also true that the critical nature of this problem at the present time has aroused the concern of agencies with extensive financial resources. Such organizations are in a position to render assistance on a scale far beyond anything pictured in these discussions. The availability of large sums makes it difficult to withstand the temptation to forge ahead faster than the people are prepared to move. If this natural but dangerous tendency can be curbed, particularly in certain areas of activity, sizable appropriations can result in proportionally large achievements.

With ample funds, a country can be dotted with numerous projects, and the areas in between will rather quickly adopt the improved methods that are being demonstrated all around. The proper development of a program need not be retarded from time to time because of the lack of funds to finance expansion—a situation with which many private agencies are all too familiar. Indigenous organizations and departments of government struggling hard with inadequate budgets and insufficient technical know-how to serve their people can be assisted to operate more effectively.

There are still other opportunities open to those with large sums at their disposal to assist in the upbuilding of the economy of depressed areas. Extensive programs can be undertaken to remove such obstacles to rural progress as the lack of adequate water supplies. While it is true that much can be done, with the cooperation of local communities, in utilizing water sources that may be tapped with a little planning and effort, large-scale projects of such a nature cannot be satisfactorily conducted without extensive research and costly engineering. Where this is the only practical solution, the initial investment, even though large, will be returned manyfold as water will enable thrifty farmers to obtain much greater yields from their labors. In many underdeveloped regions, water is the key that can unlock tremendous resources, both of land and of people.

Then there is the scourge of malaria, which in spite of modern

science is still sapping the vitality of vast numbers of otherwise energetic people. With the latest methods, it is now possible to eradicate malaria from a whole countryside. Large sums are required, but, when these are properly invested, the amount initially devoted to this activity can soon be drastically reduced. With malaria eliminated, reconstruction can proceed in a much more favorable climate.

Another serious hindrance to rural progress in many parts of the world is an antiquated system of land tenure. That the feudal system is a millstone around the necks of hard-working tenants and that it ought to be replaced are basically true but greatly oversimplified statements. When this form of tenantry first emerged many centuries ago, it rendered important services to those who worked the soil. Owing to developments in the past few decades, this ancient system is now largely outmoded. Nevertheless, it still renders certain kinds of services which must be provided in other ways when a change in land ownership is effected. Thus the problem has many ramifications and must be carefully handled.

To deal aggressively with the question of land tenure is generally beyond the scope of most private agencies. Even the technical assistance branches of the United States Government and the United Nations tend to avoid coming to grips with this delicate and complicated matter. The result is that some of our technical aid may go to support those who are already exploiting the masses. A private organization, but one with large resources, has the best chance to tackle this problem courageously. Attempts of individual governments to deal with the land situation should be encouraged in various ways. Research can be undertaken to study the entire problem. Attention should be given to the services now being rendered by the prevailing system and to the best methods of protecting these services when land reform is brought about. Experiments dealing with certain of these questions can be undertaken, and projects can be conducted to demonstrate the incentive which individual ownership of land inspires.

Many other items could be listed which deserve the attention of

agencies with considerable funds at their disposal, but those mentioned will indicate the possibilities.

In one direction haste is needed—we should share quickly with all peoples of the world the more abundant way of life that twentieth-century knowledge can make possible.

Index

Acheson, Barclay, 146-147
Adult education, 81, 93-94, 106, 113, 162
  see also Education, Extension, *and* Illiteracy
Adults, influence of youth organizations on, 71-72
Aghion Pnevma (Greece), 61-62
Agricultural agents, 105
  see also Rural leaders, agricultural
Agricultural Education, Division of (Greece), 102
Agricultural experiments, 5, 11, 74, 76-77
Agricultural improvement, 1-25, 31, 63, 73, 147, 162, 193
  and artificial insemination program, 178, 180-181
  and education, 81, 99, 124-141, 150, 158-159, 162
  and home management programs, 41, 49, 60
  in a total program, 96, 100-102, 105, 113, 114
  influence of recreational programs on, 73
Ajlani, Souad, 52-55
Albania, farm schools in, 124-139
Albanian-American Institute, 128, 132
Alborz College, 7
Allee, Ralph H., 132, 137-138
American Mission to Greece, 117
American University of Beirut, 63, 64, 75
Ano Kopanos (Greece), 119, 120
Arabs in Palestine, 143, 144, 145, 151, 156, 163
Aramouni, Victor, 74-80
Artificial insemination of livestock (demonstration in Greece), 164-184
Asfaha, Mr., 94
Asmara (Eritrea), 82, 86, 91-95
Aspropyrgus (Greece), 171-173, 179
Athens (Greece), 170
Attica, artificial insemination program in, 170-173, 177, 178

Babbila (Syria), 42-46, 47, 49, 53, 55, 56, 57, 59, 60n
Bar Elias (Lebanon), 65, 67, 71, 74, 76, 78, 79
Bedouin farmers, 64, 66
Beit Dajan (Palestine), 153
Bekaa Valley, 63, 65, 69
Birjandi, Amir, 10, 22
Bitar, Amineh, 46, 48, 53, 56
Books, 62, 122, 155
  see also Libraries, Reading rooms, *and* Textbooks
Bowman, Humphrey, 144-159
Boy scouts, 64, 104
Boys, clubs for, *see* Future Farmers of Greece *and* Youth organizations
British Military Administration (Eritrea), 83, 94
Bunsen, Bernard de, 159

Child care, 50, 81, 109, 129
Cholera, 30, 53
Christians in the East, 74, 87, 88, 91, 92, 144, 156
Chtaura (Lebanon), 67, 73, 77
Church, Greek Orthodox, 183
Church of the Brethren, 167, 174
Churches, 113, 194

INDEX

Clinics:
for mothers and babies, 44-45, 48, 79, 80, 109-110, 119
veterinarian, 175-176, 178, 183
Clubs for adolescents, *see* Future Farmers of Greece *and* Youth organizations
College, teacher training, 156
College of Agriculture (Greece), 170
Communication, difficulties in, 171
Community:
centers, 66, 104
cooperation, 67-68, 192
improvement by boys, 64
life and education, 99, 149, 160-161
see also Villages
Cooperatives, 78-79
Coptic Christians, 87
Cornell University, 2, 69, 100, 106, 116, 167
Cultural needs of rural people and recreational programs, 61-62, 103
Curriculum:
of farm schools, 136
of rural schools, 148, 156, 159
Cyprus, farm schools in, 124, 139-141

Damascus, 41, 49, 50, 51
Day nurseries, 109, 119
DDT, 17, 23, 25, 31, 54
Deir-El-Hajjar, 54
Demonstration:
agricultural, *see* Agricultural improvement
homes, 42-45, 107, 120
in artificial insemination, 180
method, 185-190, 195-196
schools, 147
Dietrick, Mathias, 167-182
Diphtheria, 23
Disease, 26, 31, 36, 110, 111
see also Health, Sanitation, *and diseases by name*
Doctors, 80, 106, 129
Dormitories, farm-school, 126, 131, 133, 140
Douma (Syria), 46, 50, 53
Dramatics, 67-68, 70-71
Dysentery, 25, 29, 110

Economic Cooperation Administration, 116, 118
Economou, Demosthenes, 120
Economy, improvement of, 77-78, 99, 193
see also Agricultural improvement
Education, 13, 17-22, 81-95, 113, 117, 164, 195
adult, 93-94, 106, 113, 162
and agriculture, 81, 99, 124-141, 150, 158-159, 162
and artificial insemination program, 177, 178, 179
and training of leaders, 10, 85-87, 90-92, 186
farm schools, 124-141
for women and girls, 42, 43, 50, 57-58, 66, 92, 151, 153
four essentials of, 98-99
in health, 27, 31, 34-35, 40, 46, 79, 80, 106
rural schools, 142-163
Elliott, Irvine, 167-182
Eritrea, education in, 81-95
Ethiopia, 83
Exhibit of livestock, 180-181
Extension:
law in Greece, 116
methods applied in East, 99, 106, 117, 127, 128, 129, 138, 161, 164, 183, 195
Eyer, Clarence O., 49, 54

Farm:
buildings, 8-9
machinery, 12, 22, 126, 131, 132, 164
schools, *see* Schools, farm
Farmers, 97, 113, 145
acceptance of new ideas by, 172
participation in artificial insemination program, 177, 179
Farming, *see* Agricultural improvement
Farrell, Jerome, 159
Fellaheen, 42
Finances:
of artificial insemination program, 180, 183
of rural reconstruction programs, 28-29, 73-74, 114-115, 116, 192, 196
of rural schools, 143, 158
Fly control, 133
see also DDT *and* Sanitation
Food preparation, 109, 133
Four Essentials of Education (Jones), 98-99
4-H Clubs, 105, 117
Future Farmers of Greece, 61, 62, 105, 115, 122

Gala Nou (Iran), 14, 23
Gardens, rural school, 148-149, 154-158

Girls:
clubs for, *see* Youth organizations
education for, *see* Education for women and girls
Governments, importance of cooperation with, 2-4, 192
Grading in farm schools, 136-137
Greece:
artificial insemination program in, 164-184
health program in, 26-40
recreation program in, 61-62
total program in, 96-123
Group health insurance, 80

Halpin, John, 182-183
Hamdi, Abu, 56
Haritides, Father, 123
Hayden, Lyle Johnson, 2-21
Health, 13, 15-17, 23, 26-40, 44-46, 47, 53-54, 79, 81, 96, 134, 138, 193
department in farm schools, 129
education, 27, 34-35, 50, 99, 106, 128
in a total program, 105, 110-113
public, 31
see also Sanitation
Home demonstration agents, 106, 107
see also Rural leaders, home management
Home management, improvement of, 13, 20, 25, 31, 41-60, 63, 73, 81, 121, 147, 193
importance of proper approach, 41-42, 49-52, 60n
in a total program, 96, 99, 105-110, 113, 115
Homes:
demonstration, *see* Demonstration homes
sanitary conditions in, 36
workers' visits to, 45, 56, 57, 79, 108
Housing:
farm school, 126, 131, 133, 140
rural, 8-9, 42
"How the Greeks Are Saving Greece" (Koskinides), 28-31
Hygiene, *see* Health *and* Sanitation

Illiteracy, 18-19, 58, 66, 81-95, 113, 145, 155
see also Education
Inseminators, training of, 172, 174
Iran, 118, 186
agreement with Near East Foundation, 2-4
agricultural improvement in, 1-25
Italy and Eritrea, 83, 84

Jeramana (Syria), 51, 53
Jews in Palestine, 144-145
Jones, Dr. Thomas Jesse, *Four Essentials of Education*, 98-99
Jordan, Dr. S. M., 7
Jubran, Na'ima, 152

Kadin-Han (Turkey), 30
Kadoorie, Sir Ellis, 148
Kaplan, Dr. M. M., 175-176
Karantounias, Dr. Anastassios, 175
Kelsey, Lincoln D., 167
Keren (Eritrea), 91
Khouri, Hanna, 63-76, 80
Kilkis (Greece), 121
Kitchens, improvement in, 44
Knapp, Merrill, 132
Koskinides, Apostolos, 27, 110-113, 115, 117-118, 122
"How the Greeks Are Saving Greece," 28-31
"Organizing Environmental Sanitation Programs in Rural Areas of Greece," 31-40
Kynaston-Snell, Major H. F., 84-95, 142
Manual for Eritrean Teachers, 92
Kyriakou, Sophia, 118, 121

Land:
for farm schools, 125, 130, 134, 140
tenure problem, 197
Language difficulties in education, 84-85, 87-88, 92, 113
Latrines, 29, 30, 36, 37, 42, 76, 110, 112, 121
Laubach method of teaching adult illiterates, 22
Leaders, rural, *see* Rural leaders
League of Nations, 97, 143
Lebanon, recreational program in, 61-80
Libraries, 70, 72, 94, 95, 104, 155
Livestock, artificial insemination of, 164-184
Local leaders, *see* Rural leaders
Lubbat, Elaine, 151

Macedonia, artificial insemination program in, 173, 177, 178, 180-181
Macedonian Program, 33, 61-62, 96-123, 160
survey of sanitary conditions, 35-36, 98
Macedonian Village Extension, 96

Macris, Aristides, 102, 117
Malaria, 15, 17, 19, 23, 26, 28, 31, 36, 110, 111, 112, 129, 138
Mamazan (Iran), 5, 9, 12, 18, 19, 20, 22, 23, 25, 27
Mandra (Greece), 29-30
Mansi, Al (Palestine), 162
Manual for Eritrean Teachers (Kynaston-Snell), 92
Marj (Lebanon), 70, 74, 75, 76, 78, 79, 80
Medical treatment, 44-45, 48, 79-80
  vs. health education, 34-35
Megali Vrysi (Greece), 108-109, 121, 122, 123
Micos, Nikola, 119
Midwives, local, 44-45, 46, 48-49
  see also Nurse-midwives
Monroe, Paul, 146-147
Morphou (Cyprus), 139
Morrison, F. B., 167
Moslems, 45, 52, 56, 71, 74, 87, 88, 91, 92, 151, 156
Mosques, 194
Mosquito control, 129, 133
  see also DDT *and* Sanitation
Mothers, medical care and instruction for, 44-45, 48, 79, 80, 109-110, 119
Moussouros, Basil, 100, 102, 114, 117
Music, 104, 122
Mussolini, 83

Najjar, Lydia, 45
Nashabeyeh (Syria), 46-48, 51, 52, 53, 56
National School of Hygiene, 31
Near East Foundation, 1-5, 7, 9, 18, 21, 28, 31, 33, 42, 46, 49, 51, 52, 61, 63, 65-66, 69, 73, 96, 97, 102, 112, 117, 123, 128, 129, 130, 139, 142, 146, 150, 160, 161, 165, 166, 167, 169, 175, 180, 183
Near East Relief, 30, 97-98, 103
Newssheet, monthly, in artificial insemination program, 177, 183
Noe, Theodore H., 17, 21, 24
Noori, Ali, 21
North Carolina, University of, 27, 31
Nurse-midwives, 44-46, 48-49, 53, 74, 79, 80
Nurses, public health, 107

Ohio State University College of Agriculture, 167
"Organizing Environmental Sanitation Programs in Rural Areas of Greece" (Koskinides), 31-40

Palestine, rural schools in, 53, 55, 142-163
Palishth (Iran), 8, 18, 24
Pantelemon, Bishop, 183-184
Papadapolis, Alexander, 122
Paratyphoid, 29
Parrott, Martha, 106-108
Pays, Theodore, 61, 62, 103-104, 115, 117, 122
People:
  importance of proper approach to, 41-42, 49-52, 100-101, 191-192
  see also Farmers *and* Women
Pergamos (Cyprus), 140
Photography and recreation, 104
Plain Talk, 28
Playgrounds, 115
Political problems, 53, 55, 60
Poultry housing, 8
Programs, *see* Rural reconstruction programs
Public health, *see* Health *and* Sanitation
Public health workers, 32, 36
  see also Sanitarians

Qasem, Ahmed, 144, 148, 150, 155, 156, 159-160

Radio, 72
Ramallah (Palestine), 151-152
Reader's Digest, The, 28
Reading rooms, 104, 115, 122, 160
Reconstruction, rural, *see* Rural reconstruction programs
Recreation, 61-80, 96, 99, 134
  in a total program, 103-105, 113, 115
Reforestation, 157
Refugees in Greece, 97
Religion, 45, 52, 56, 74, 113, 193
Religious leaders and education, 88
Richards, Jack, 13
Rizo (Greece), 28-31
Rockefeller Foundation, 107, 111, 186
Rural Central School (Morphou, Cyprus), 139
Rural housing, *see* Housing, rural
Rural leaders, 100-103, 105-106, 111-118, 185-190, 192-193
  agricultural, 6-10, 20, 23, 25
  education, 94-95
  home management, 41, 45, 46, 49-50, 57, 106, 107

qualifications of, 103 188, 194
recreation, 63, 69, 74-75
training of, 96, 102, 107-108, 110, 111, 115, 118, 187-190
Rural reconstruction programs, 96-123
application of science in, 164-184
coordination of, 104, 113-114
importance of cooperation at all levels, 192
initial approach, 41-42, 49-52, 191, 193
leaders for, *see* Rural leaders
long-time effects of, 118-123
place of detailed surveys in, 194
value of demonstration method, 195-196

Sadeddin, Rashad, 161-162
Saeedy, Ali, 9-10, 15, 20
Salisbury, Glenn, 167, 178
Salonica (Greece), 111, 180-181
Samaria, 148
Samuel, Sir Herbert, 146
Sanitarians, 32-33, 36
qualifications of, 37-38, 39
training of, 38, 112, 186-187
Sanitation, 13, 15-17, 19, 20, 23, 25, 26-40, 41, 57, 59, 60n, 63, 73
in a total program, 105, 108-113, 115, 122, 129, 133, 186-187, 193
see also Health
Sawaf, Fikrat, El-Sharkass, 46-47
School of Hygiene at Athens, 112
Schools, 8, 17-19, 42, 82, 83, 104, 113, 127, 142-163, 194, 195
and training of rural leaders, 185-186
farm, 99, 124-141
health education in, 40
mission, 144
sanitary conditions in, 36
see also Education
Science and rural reconstruction, 164-184
Selassie, Haile, 83
Shaybani, Feridoon Bani Soleiman, 7-9, 10, 12
Smallpox, 23, 30
Smyrna Disaster, 97
Social activities, *see* Recreation
Social centers, *see* Community centers
Specialization in crops, 140
Sports, 71, 72, 103
Survey of Macedonian villages, *see* Macedonian Program, survey
Surveys, proper time for, 194
Syria, improvement of home practices in, 41-60

Teachers:
farm school, 125, 135
rural school, 20, 21-25, 84-87, 90-92, 94, 138, 146, 151, 152, 160-161
Textbooks, 84-85, 87-88, 94, 95, 125
Theodoridou, Vassiliki, 119
Tireh (Palestine), 154, 155
Tourkohori (Greece), 110-111
Trades, farmers induced to learn, 78
Training:
of farm-school teachers, 125, 135
of home economics leaders, 57
of inseminators, 171-172, 174
of local midwives, 46, 48-49
of rural leaders, 25, 96, 102, 107-108, 111, 115, 118, 185-190
of rural school teachers, 20, 22, 24, 85-87, 90-92, 94, 148-151, 152, 156
of sanitarians, 33, 112
Trans-Jordan, 63, 64
Tuberculosis, 36
Tulkarm (Palestine), 148, 161
Turkey, health in, 30
Turner, Dr. C. E., 31
Twoldemedhen, Isahac, 85
Typhoid, 25, 26, 29
Typhus, 30

United Nations, 53, 197
United Nations Food and Agriculture Organization, 117
United Nations Relief and Rehabilitation Administration, 51, 169, 174
United States, 53, 55, 161, 197
United States Naval Research Unit of Cairo, 17

Vaccination, 23
Venizelos, Eleutherios, Prime Minister of Greece, 97-98
Veramin Endowed Properties and Veramin Committee, 4-5, 11, 13, 14, 18
Veterinarians, 175-176
Village:
centers for home demonstration, *see* Demonstration homes
living reproduced in farm schools, 131, 133
schools, *see* Schools, rural
Village Welfare Service of American University of Beirut, 64-65, 75
Villages:
importance of workers' living in, 35-36
sanitary conditions in, 35-36
training young farmers in, 99

Vocational training, 99, 124-141
Vogt, Josephine, 51-55, 56, 57, 107

Water supply and contamination problems, 13-17, 19, 23, 28-31, 35-36, 42, 78-79, 110, 111, 196
Wells, drilling and sanitation of, 14, 23, 29, 42, 78-79, 112
Women:
  as rural school teachers, 128, 151
  clubs for, 71
  education for, 42, 43, 50, 57-58, 66, 92, 151, 153
  programs for, 41-60, 105-110
  position of, 41, 52, 193
World War II, 115, 116, 117-118
Wright, Colonel Daniel E., 31, 186-187

Y.M.C.A. (Greece), 180
Youth organizations, 61-72, 74-77, 104-105, 115, 122

Zafari, Sanieh, 45, 59