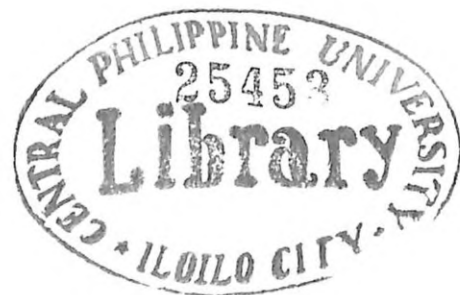


A STUDY OF THE COOPERATIVE AGRICULTURAL EXTENSION
PROGRAM OF CENTRAL PHILIPPINE UNIVERSITY

A Thesis
Presented to
the Faculty of the School of Graduate Studies
Central Philippine University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts in Education

by
Rosendo C. Arandela
May 1960



CHAPTER I

INTRODUCTION

I. AGRICULTURE IN THE PHILIPPINES AND THE NEED FOR IMPROVEMENT

Agriculture, the great civilizer. If one were to agree with Ralph Waldo Emerson that "the first farmer was the first man, and all historic nobility rests on possession and use of land,"¹ then one must also agree that agriculture is the mother of many of the arts of mankind. Only a people possessing wealth, and land has always been one of the real bases of wealth, could produce the leisure and a leisure class or non-laboring class from which the arts have sprung. Therefore, agriculture has been one of the great civilizers.

Today the world is dependent upon the farmer and his craft. Man has to secure food and raiment by the "sweat of his brow"² since there are few, if any, places on earth so favored that one has simply to reach into the trees for his food, and slay animals in the forest for his clothing. The growing population demands an enormous food supply. Hence,

¹ Benjamin Hunnicutt and William Watkins Reid, The Story of Agricultural Missions (New York: Missionary Education Movement of the United States and Canada, 1931), p. 3.

² Genesis 3:19.

the problem of providing sufficient food for this growing population seems to be the greatest human enterprise in the present time.

Every human being, in a real sense, is dependent upon the farmer. Were he to strike--to refuse to plant the seed, to refuse to produce--people would starve. In return for the food the farmer gives people, society expects each one of them, directly or indirectly, to contribute to his well-being, to his happiness, to his needs of body, mind and soul. "We can develop the arts of peace, science, philosophy, education and religion only if the farmer is given and uses these arts."³

It is still among the rural people that they find the greatest concentration of poverty, ignorance, disease, and civic disabilities. There is poverty of body, mind and even spirit. Undernourishment is greatest among them. Of all people, their expectancy of life is shortest.⁴ A greater number of children are born and die among them than in any other social group. Their homes and clothing are the poorest. The percentage of illiteracy among them is highest.

³ Hunnicutt, loc. cit.

⁴ John Reisner, "The Rural Church and the Rural Billions," Philippine Christian Rural Fellowship Bulletin, 8:3, February, 1955.

They enjoy the fewest educational advantages. They suffer most from usurious rates of interest and unfair practices on the part of the landlord and officials.

Many are on farms that are too small to provide a decent living; and their practices are inefficient. Their religious beliefs are compounded of truth and superstition. They rely on gods that cannot help them. Their ambitions are stifled; their lives are frustrated. Daily they are engaged in a struggle for mere survival.

On the other hand, rural people are important. They are important because they are the keepers of the world's most precious resource--the soil. On their stewardship of it depends the welfare of the human race. Even today, and especially in the Philippines, not enough food is produced to provide adequate nutrition for all. This is a real problem and few of the people who are well-fed are aware of it. The battle for enough food for the rapidly increasing population is one of the significant struggles of the times.

The continuing problems, food and population. According to statistics,⁵ in 1918, the population of the Philippines was placed at 10,314,310; in 1948, it jumped to 19,234,182;

⁵ E. P. Petanne, "Twin Trouble, Food and Population," The Sunday Times Magazine, 26:38, April 30, 1961.

and a preliminary count made by the Bureau of Census and Statistics in February, 1960, showed a count of 27,455,799.

Rice production from 1918, to the present, according to the same report, has only ranged from around eighteen cavans per hectare to about thirty. The noted Jesuit demographer, Fr. Francis C. Madigan in an analysis of Philippine population problems in 1959 wrote:

Total food production . . . increased by 35 per cent between 1940 and 1954 while our population was increasing at the rate of 48 per cent during the seventeen-year period from 1939 to 1956.⁶

The Division of Agricultural Economics of the Department of Agriculture has placed the Philippine annual rice requirement at 44,897,620 cavans. The 1961 rice production estimate of the National Economic Council is 44,525,700 cavans. This year production estimates will be short by some 371,920 cavans.⁷ This means, people will continue to import this cereal as they have always been doing. They will also continue to import meat, dairy products, fish, fruits and vegetables, flour, sugar and sugar preparations, coffee, cocoa, spice and other food products.

The same office reported that the Philippine annual rate of population growth has been roughly estimated at 3.2 per cent, a figure which is still being "polished." Japan

⁶

Ibid., p. 39.

⁷

Ibid.

has a 1.2 per cent rate of population growth, one of the lowest in Asia. India's is believed to be 2 per cent; Taiwan, 3.6 per cent; and the U. S., 1.8 per cent. This merely shows that the Philippine rate of population growth ranks among the world's highest. What does this 3 per cent annual increase in population mean?

Using the 1956 count of 22.5 million as the basis, one can estimate that a 3 per cent annual increase would give the Philippines 65 million by 1995; and by the year 2010, the population of the Philippines would be around one hundred million or more.

The problem today is one of population outstripping food production. Further analyzed, it simply means that the Philippines is not producing as much and as fast as one creates an increasing number of mouths to feed. Food remains the basic problem. The figures on Philippine food imports bear testimony to this failure despite talk of surpluses.

The reports on surpluses in rice production have not brought down the price of this cereal. While the people may grant that the government has made great strides in solving the problems of the country, they simply cannot ignore the fact that certain problems, like food and its relation to population, are not problems that can be solved over a period of five or ten years. The further implications of this

problem shall remain with the people.

The implication of this rapid growth of population is obvious. In certain areas, the number of people in relation to natural resources and their present state of development is so great that anything above a subsistence type of agriculture is almost an impossibility. In a survey made in China, Dr. Lossing Buck of the University of Nanking found that the average size farm which could be found to be economically productive was approximately 2.7 hectares and would support a family of five. The present average-sized family in the Philippines has six members; consequently, it requires more land than its Chinese counterpart. However, the average-sized cultivated farm in the Western Visayas was: (1) in Antique, 1.42 hectares; (2) in Capiz, 2.04 hectares; (3) in Iloilo, 2.4 hectares; (4) in Occidental Negros, 5.48 hectares; and (5) in Romblon, 2.48 hectares.⁸

Thus, the average farm in the Western Visayas is smaller than what was found to be an economical-sized farm in China where farming is almost the same as that in the Philippines. How does this situation affect food production? If all the food produced in the Philippine area were changed to calories (a calorie is a measure of energy, the amount of

⁸ Agricultural Economics Division, Philippine Agricultural Situation (Manila, Philippines: Department of Agriculture and Natural Resources, September, 1959), 1:5.

heat required to raise one gram of water one degree centigrade) what sort of picture do the people have? The following revealing figures will show:⁹

Food deficiency

Island	Total Calories	Requirement	Deficiency	Rice Equivalent
Panay	447,174	534,127	86,953	27,623 tons
Negros	307,700	482,968	175,268	55,677 tons
Romblon	12,474	39,353	26,878	8,538 tons

Thus, in the West Visayas alone the people need to produce or purchase 91,838 tons of rice to feed the people adequately. In order to properly feed the people, one needs to raise animals besides. It is here where the people are in most need. The livestock production, according to reports, has been so low that while Filipinos generally manage to eat enough, nutrition studies show that the population in general suffer from protein deficiency. No wonder the Filipino is beset with different diseases due to malnutrition. The great mass of the underprivileged population is suffering from starvation. The fact that they do not go around hungry or dying of hunger, after being filled with rice or camote, kangkong or other vegetables, makes people believe that they are not starving. The fact is that they are. They are

starved for the very essential nutrients especially protein, particularly animal protein. Starvation is ill-defined in the minds of the people in this country. Starvation means "mass morbidity rather than wholesale mortality."¹⁰ It is a state brought about by subnormal caloric intake, the forerunner of broken resistance and physical strength, impaired endurance, intelligence, productivity, and a lowered level of human behavior which leads to hopeless deterioration. The evident decadence of the morals of the people today may be due to these causes. No amount of vitamin-impregnated rice, corn, camote tops, and kangkong will prevent these morbid conditions without the help of food of animal origin.

Food production. Despite reports that people actually enjoy high averages of rice yields per hectare, there are others who deny this. Not willing to be lulled into a false sense of "rice security," they may start asking themselves why the production per hectare has remained at around thirty cavans, one of the lowest in the world.

A study of the cultivated acreage in 1956 showed that of the area devoted to rice, "only 45 per cent is being used. The rest is idle, left fallow or abandoned."¹¹

¹⁰ Salvador Araneta, "Improvement of Agriculture," The Educational Quarterly, 3:3, November, 1955.

¹¹ E. P. Petanne, "Twin Trouble, Food and Population," The Sunday Times Magazine, 26:38, April, 1961.

The practice of scientific farming is the next important problem. According to a paper presented by the Philippine Delegation to the Fifth Food Administration Organization Development Center on Farm Management for Asia and the Far East held in Manila October 3 to 21, 1960, many of modern farmers have adopted the approved practices in rice culture, but the majority remain or choose to be tied to the traditional practices of rice cultivation.¹² The same report stated that a study made by the Economic and Social Research Program of the University of the Philippines on rice-farming areas near the College of Agriculture in Los Baños, showed that there is actually a cultural resistance to the new systems of improving rice yields.

At first glance, this may sound strange, but it has been found that there is actually a mixture of apathy and head-shaking among farmers posed with the challenge of the new system of rice culture. Scientific farming, in other words, has encountered a basic problem; namely, old attitudes, old traits, propitiation, magic or even taboo.

It has further been discovered that since the new system of crop production requires continued work in the fields, the typical, or traditional, farmer feels reluctant

¹² Rafael Bartolome (ed.), Coffee and Cacao Journal, 3:271, January, 1961.

to use it. The disruption of his old seasonal pursuit disturbs his way of life. In the end, he has shown a none-too-eager acceptance of the new systems of cultivation.

Population and unemployment. The rather low increase in the average yield of rice per hectare and the fast growth in population means that it is only logical that the Philippines imports rice. Then, the increase in population naturally aggravates the unemployment problem.

One may consider unemployment, like population growth, as constants.

The need of a rural philosophy. It seems that the problems of agriculture and rural life can be changed by a change in the philosophy of life of practically every person. There should be a recognition of the absolute necessity of the farmer and his work. Something must be done to reward him. The soil must be loved; the people must regard its use not as something that dirties the hands, but as a sacred trust for the present and the future. Coming generations will doubtless wear out and use up the coal deposits and the iron mines, but the resources of the upper crusts of the earth, that few feet on which animal and vegetable life lives and depends, need never be exhausted if properly and scientifically cared for. Left alone by man, the impoverished soil will grow rich again from nature's gifts.

George Russel, the famed Irish poet and philosopher, gives this word of warning--a word that is increasingly necessary the world over:

I have been frightened as a human being by the exodus of the rural population to the cities which have sprung up magically in half a century I wish to get the reformers and foreseers in your country to think of building up a rural civilization, something which the world has never yet seen. It is the noblest and most practical of human enterprises, the building up of a civilization. And it will need the highest political genius to so organize the rural community that something of the culture and prosperity of so great a state will be reflected in the men in the villages and fields.¹³

This is interpreted to mean that as population increases and as urban industry calls for more and more sturdy sons of the country, it is important to determine what proportion of people must remain close to the soil so that a nation's life may find balance. Rural depopulation cannot go on endlessly. Such a process will in time bring disaster to the country.

Recognition of the needs of the farmer. Today, as perhaps never before in human history, the eyes of the world are upon the farmer. Everywhere in almost all places there is recognition of the need for a better environment for the men and women living and laboring on the farms, and for better attention to the processes of agriculture, the distribution of agricultural products, and the material reward of

¹³ Hunnicutt, op. cit., pp. 6-7.

the farmer.

In the United States legislative measures are being sought to better the social and economic conditions surrounding the isolated tillers of the soil.

Soviet Russia has attempted a reorganization of its agricultural system, attempting the most colossal economic readjustment in history. The Soviet government has nationalized the soil and is giving its best energy toward making collective rather than individual farming a success.¹⁴

The Japanese farmers have attempted to solve their difficulties with landowners and with consumers by the organization of unions for collective bargaining.¹⁵

Korea, according to Chang, Food Administration Organization Agricultural Adviser,¹⁶ is faced with her greatest economic problem because of the very low average yearly income of the peasant, which is less than one hundred fifty dollars.

The Philippines is awakening to the fact that something must be done to help the farmer. Intelligent groups of the people believe that this country would be prosperous if the farmers were progressive. It is common knowledge

¹⁴ Ibid., p. 7.

¹⁵ Ibid., p. 8.

¹⁶ C. W. Chang, "Agricultural Extension in Asia," Rural Development Movement in Asia and the Far East (Bangkok, Thailand: FAO Regional Office for Asia and the Far East, February, 1958), p. 6.

that the economy of the country is based upon agriculture.

Various agricultural programs designed to alleviate the farmers' living conditions have been initiated by the leaders of the country. On July 16, 1952, the Bureau of Agricultural Extension was created by law as an answer to the challenge posed in the rural areas--how to help the farmer and his family help themselves and improve their lot.¹⁷ Through this new Bureau, the government hopes to put an end to the many ills that beset farm life, like insanitary conditions, outmoded farming methods that result in low food production, illiteracy, and the offshoot of these three--poverty. As the backbone of the nation, the farmer should be well-informed, highly skilled and energetic so that he may be strong enough to bear the burden of having to feed adequately and continuously the country's ever-increasing population. Schools, both public and private, through the direct supervision of this bureau are to arm the farmers with knowledge and training necessary to fit them for the enormous task before them. What has been done so far to promote better living conditions among the farmers? The people who produce the real wealth of this country are poor due to a number of reasons, such as (1) inefficient production, (2) partial employment, (3) tenancy, (4) usury,

¹⁷ Director of Agricultural Extension, "For Rural

(5) inadequate and inefficient government services, (6) low level of education, (7) very small landholdings, and (8) undernourishment and malnutrition. Should they be allowed to stay in the same situation?

II. THE STATEMENT OF THE PROBLEM AND ITS IMPORTANCE

It is common knowledge that all people who want a better life will strive for it if they know how and if they have a chance to achieve it. Helping these more unfortunate people has a special meaning in under-developed areas of the country. They need more food to eat; they want to be free from illness, and free from illiteracy; they want the knowledge to free them from the clutches of ignorance and superstition; they want to enjoy the blessings of the progress of the world today. What is the way out? Are the farmers adequately informed and guided? Who are directly responsible in implementing this program of extension? Someone must generate or impart the basic idea underlying the program, lead in bringing the idea into acceptance, and stimulate a widespread desire to have the activities put into effect.

This study of the Cooperative Agricultural Extension program of Central Philippine University attempted to present

its contributions to the program of rural uplift. Much has been said and written about extension, but how much actually has been accomplished? It was, therefore, deemed important by the investigator to find out the answers to these questions:

1. How much actually has been accomplished by the Agricultural Extension Service of Central Philippine University within the period of ten years since the program was started? An evaluation was made of the extent of the progress achieved thus far. In any extension program, the main concern of the worker should be the changes effected by the people; the program becomes merely a vehicle through which the desired changes are brought about.

In evaluation, three important aspects were included: (1) the goals to be accomplished, (2) the people with whom the goals were accomplished, and (3) the evidence of accomplishment.

2. What different phases of activities have been engaged in by the University in its program of rural improvement? The specific activities decided upon, whether of a short-term or long-term nature, must have their own goals. These contribute to and become a part of the over-all objectives. The worker and the people in the community, cooperating with each other, must have the goals clearly visualized: (1) cooperation and action between people,

rather than the imposition of a standard, set program as suggested by a dictatorial setup, (2) a continuous check-up to see that activities are sponsored by the people and not perpetuated by the efforts of outsiders only, and (3) a special program patterned to fit the life of each particular community, and designed to lend satisfaction to its members in their own way of life, excluding the importation of a set formula.

3. What specific contributions have been made to the rural communities and other entities like the Bureau of Agricultural Extension of the government and the Evangelical as well as other churches, in their cooperative extension efforts? Extension work of the University does not differ very much from that in other places or entities insofar as subject matter or methods are concerned. It has been prepared, however, to deal with a larger variety of subjects and problems under certain specific situations. A listing of a few of these subjects will give some idea of the specific contributions that have been made in cooperation with the government agencies and the churches. Here, then, is a list of some of the significant activities in which Cooperative Extension services of Central Philippine University have been involved: (1) Lord's Hectare, (2) Rice Variety Tests, (3) Practical Farm Study Classes, (4) Farm Study Correspondence Course, (5) 4-H Clubs, (6) Literacy Classes, (7) Demonstration Center

Projects, and (8) Institutes and Seminars.

4. Is there a recognized need for a more solid foundation as a basis for a forward movement? There are four questions for interpreting the results of the program as useful criteria which might give direction to the study.

(1) What has happened? (2) With whom has it happened?

(3) Is this what the objective called for? (4) If so, what next step is indicated and how must the objectives be changed to meet this?