POSSIBLE ADAPTATIONS IN THE FUNCTIONS OF SECONDARY AGRICULTURAL EDUCATION TO ENHANCE RURAL COMMUNITY DEVELOPMENT IN VENEZUELA

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TABLE OF CONTENTS

Chapter Page

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

Venezuela has suffered through many transformations in the last decade. Accordingly, the Venezuelan economy has changed from one purely agricultural to an economy basically sustained by petroleum sales. This change has greatly accelerated the rural exodus to urban areas. According to information supplied by El Banco Central de Venezuela (1) in 1936 the rural population constituted 71.10% of the total, and in 1975 was reduced to 21%. Within the remarkable transformation from predominantly rural to urban, agriculture tended to lose significantly in importance, with a reduction of its proportionate contribution to the gross national product (GNP). However, the importance of agriculture as a leading enterprise in Venezuela is sustained by a favorable climate since it has adequate rainfall and a temperature range of 65-95^{o}F year round as well as moderately fertile soils. These desirable natural factors promote the position of agriculture as an industry contributing significantly to the nation's economy.

Besides petroleum, mineral resources include: iron, diamonds, gold, coal, salt, asbestos, gypsum, limestone, and magnesite.

Venezuela is an independent country found on the South American continent. As a nation its territory covers a total surface of 912,050 sq. km. and the population now exceeds 14 million. The Federal

Constitution provides for 20 states, 1 federal district, 2 federal territories, and 72 islands. All are participating units of Federal Government.

The importance of the promotion of rural and agriculture development is, therefore, firmly established. It is further to be posited that a strong and effective program of secondary agricultural education should contribute substantially to the goal of further establishment and maintenance of a strong, ongoing program of rural development in Venezuela. It can be pointed out that the majority of professionals now working in developmental programs are graduates of secondary school programs designed to prepare middle technicians in production, extension and/or teaching agriculture.

Given the limitations currently experienced in rural development in Venezuela, the need of a somewhat new or a revised program of secondary vocational agricultural education is definitely imposed. This may well incure a reorientation of the doctrinal bases supporting the present educational system, hopefully giving it a more realistic sense and a more practical content. Included in changes greatly needed are: (1) modification of the content of programs, goals, and plans, and (2) adaptation of teaching methodology in such a manner as to encourage the evolvement of an educational politic more cognizant of the needs of the agricultural sector.

According to Malassis, as quoted by Coverdale (2):

> Agricultural growth requires the development of rural education but usually fundamental changes in the landowning system, the size of production units, agricultural, credit, and marketing arrangements as well. (p. 6)

Statement of the Problem

In Venezuela a somewhat unsatisfactory rural situation is manifest. Such is evident in the following: (1) the low quality of life presently experienced by the rural population; (2) the growing tendency to migrate to urban areas; (3) the continuing failure of certain segments of population to gain many basic human needs; (4) the desintegration of the family nucleus; and (5) the insufficient and often even deficient existing educational opportunities. The above are not to be considered an exhaustive list of aspects and conditions which limit attainment of sorely needed rural development, but are, without doubt, those of major importance. While these conditions endure, a major thrust must be made toward the development of obtainable objectives and the implementation of actions designed to achieve such objectives. The design and implementation of action for such objectives must encompass economic, social and political segments of the country. Unless willing participation of the populace is secured, sound and well functioning rural development for Venezuela will not be accomplished. It is considered of primary importance to first determine how effective agricultural education can influence and contribute to bringing about in the populace an awareness and a desire to become involved in programs which might result in improvement of rural areas of Venezuela.

Purpose of the Study

The major purpose of the study was to determine the appropriate role of secondary agricultural education in assisting to bring about development which may result in a more improved quality of life for

rural inhabitants. A collateral or substantive integral purpose was to assess perceptions of secondary agricultural school administrators, teachers, and of farmers as to (1) present status, and (2) future needs for rural development in Venezuela.

Objectives of the Study

In order to accomplish the purposes of the study, the following objectives were formulated and served as guidelines for designing and conducting the investigation.

1. To briefly describe the present situation of rural development in Venezuela.

2. To describe the present status of secondary agricultural education in the vocational schools of Venezuela.

3. To obtain judgements regarding present effectiveness and improvements needed in secondary agricultural education.

4. To determine relationships existing between rural development and vocational agricultural education at the middle level.

5. To make recommendations for changes in secondary agricultural education which may enhance effectiveness of rural development in Venezuela.

Assumptions of the Study

For the purposes of the study, the following assumptions were made:

1. Improvement of the secondary agricultural education system should contribute substantially to the goal of the development of a stronger, ongoing rural community.

2. When secondary agricultural teachers are provided with better

working and social conditions they will become increasingly motivated to accomplish their responsibilities in bringing about improved conditions for citizens of the community.

3. Farmers living near secondary agricultural schools are willing to receive from those schools assistance and training directed toward the improvement of the quality of life in rural communities.

4. People living in rural areas tend to feel that the quality of life in the urban areas is more desirable than that they are experiencing in the community in which they are living while this may not be true, the majority of rural developers are of this opinion.

Limitations of the Study

1. This study was limited to a concern for the two areas of vocational agricultural education and of rural community development in Venezuela.

2. In terms of formal procurement of data, this study was limited to the perceptions of administrators, teachers and farmers as to selected aspects of the relationship between Vocational Agricultural education and rural community development in Venezuela.

3. Since the project area studied was located at a great distance from the United States, the problem of difficult communication and limited contact did impose somewhat of a restraint upon data collection.

4. The study may be affected by the researcher's experience as a former principal of an agricultural education high school. The personal experience of the writer was, in some instances, used to interpret the findings of certain items of the survey.

5. Data and information collected were limited to that obtained

through personal efforts of the researcher and the assistance of 20 principals of Vo-Agricultural schools of Venezuela.

6. As developed, the questionnaire was somewhat limited by review and evaluation by selected agricultural education teachers and rural development specialists from the United States and from Venezuela.

Procedures of the Study

The following steps were largely followed in terms of method and procedure, and directed toward accomplishing the purposes of the study.

1. A review of literature was made pertaining to rural development, particularly that related to Venezuela.

2. A review of literature was made pertaining to past and present functions of secondary agricultural education programs operating in Venezuela.

3. A questionnaire was designed for administration to personnel in secondary agricultural schools, including both administrators and agricultural teachers. An additional questionnaire was developed for administration to a sampling of farmers living in the vicinity of each respective school. The nature of the questionnaires was such as to direct respondents to evaluate possible contributions which selected aspects of the teaching program in agriculture might make toward successful achievements in rural development.

4. The respective questionnaires were submitted to teachers, administrators and farmers by sending them to the principal of each high school for distribution to teachers. The principals were requested to designate one teacher to supervise distribution of the questionnaires to farmers according to a grid sampling technique.

5. Collection of data was facilitated by the researcher's brief return to Venezuela. Contact with a number of respondents was made by telephone, telegrams, and radio in addition to several personal interviews.

6. Responses were collated and through data treatment were compared, analyzed and evaluated.

7. After analysis and further synthesis of data, conclusions were drawn and relevant recommendations were made.

Definition of Terms

Certain terms have special meaning as applied to the study.

Community Development: For the purpose of the study, this term refers to a continuous process of change and growth in human and natural resources directed toward the accomplishment of welfare and quality of life to be attained by citizens of community.

Change Agent: This term is used in reference to person, group or thing that effects or seeks to effect change, particularly an agent for change of social conditions.

Educational Region: Is used to designate a geographical area constituting a political subdivision for administration of economic, and social programs, including education. Venezuela is divided into eight Regions, each under the direction and supervision of the national Ministry of Education.

Educational Zone: This term is used to designate a geographical area corresponding to the state in which administration of the educational system for local schools is coordinated and supervised. Each Educational Zone is, in turn, responsible to administrative and

supervisory officials of the respective Educational Region.

Rural Community: This term refers to the people in a pre-determined area who live on dispersed farms, or in a hamlet, or village of less than 2,500 population which functions as a center for common interests.

Rural Development: Includes an interdisciplinary approach embracing all developmental sectors of a determined rural area. These sectors include: agriculture, industry, transportation, education, health, trade, credit, culture, sport, and leisure activities.

CHAPTER II

PRESENTATION OF BACKGROUND AND LITERATURE REVIEW

Introduction

The purpose of this chapter is to present select background information for the study. The review includes references to several research studies; these selected as they may relate to areas of development pertinent to this study. The selection further cites judgements and opinions of recognized authorities in this and related fields. The review encompassed five major areas: (1) accepted meanings and concepts as applied to rural community development; (2) present situation with regard to rural community development in Venezuela; (3) description of the Venezuelan educational system; (4) presentation of the situation with regard to secondary programs in agriculture, particularly in the vocational schools; and (5) suggested strategies which may be used for integrating secondary education into the ongoing program of rural community development.

Accepted Meanings and Concepts as Applied to Rural Community Development

Meaning of Community

Community has many meanings. To some it denotes a specific

geographic area, to others a social system, and to still others a set of cultural values which people share. Some concepts of community are expressed as follows. Good (3, p. 119) defines community as: "A group or company of people living fairly close together in a more or less compact, contiguous territory, who are coming to act together in the chief concerns of life."

Hiemstra (4, p. 11) states a concept of community as: "The organization of social activities and units are designed in such a manner so as to facilitate the daily living of given sets of people."

The meaning of community may change slightly with the definition of the problem and will often depend upon situations either associated with, or perhaps even contributing to, causing the problem.

Rural Community Settings for Vocational Agriculture

In Venezuela, the majority of the secondary agricultural schools are located in rural communities. In this study, Rural Community refers to the people in a determined area who live on dispersed farms, in a hamlet, or villages of less than a population of 2,500. Such a unit tends to operate as a center for sharing common interests.

Figure 1 illustrates the position and relationship of the rural community within the general context of levels of government in Venezuela. This presentation constitutes a synthesis of concepts and ideas gained from various sources. Much of the content was previously presented in a term paper prepared by the investigator and entitled "A Concept of Balanced Rural Community Development" (5).

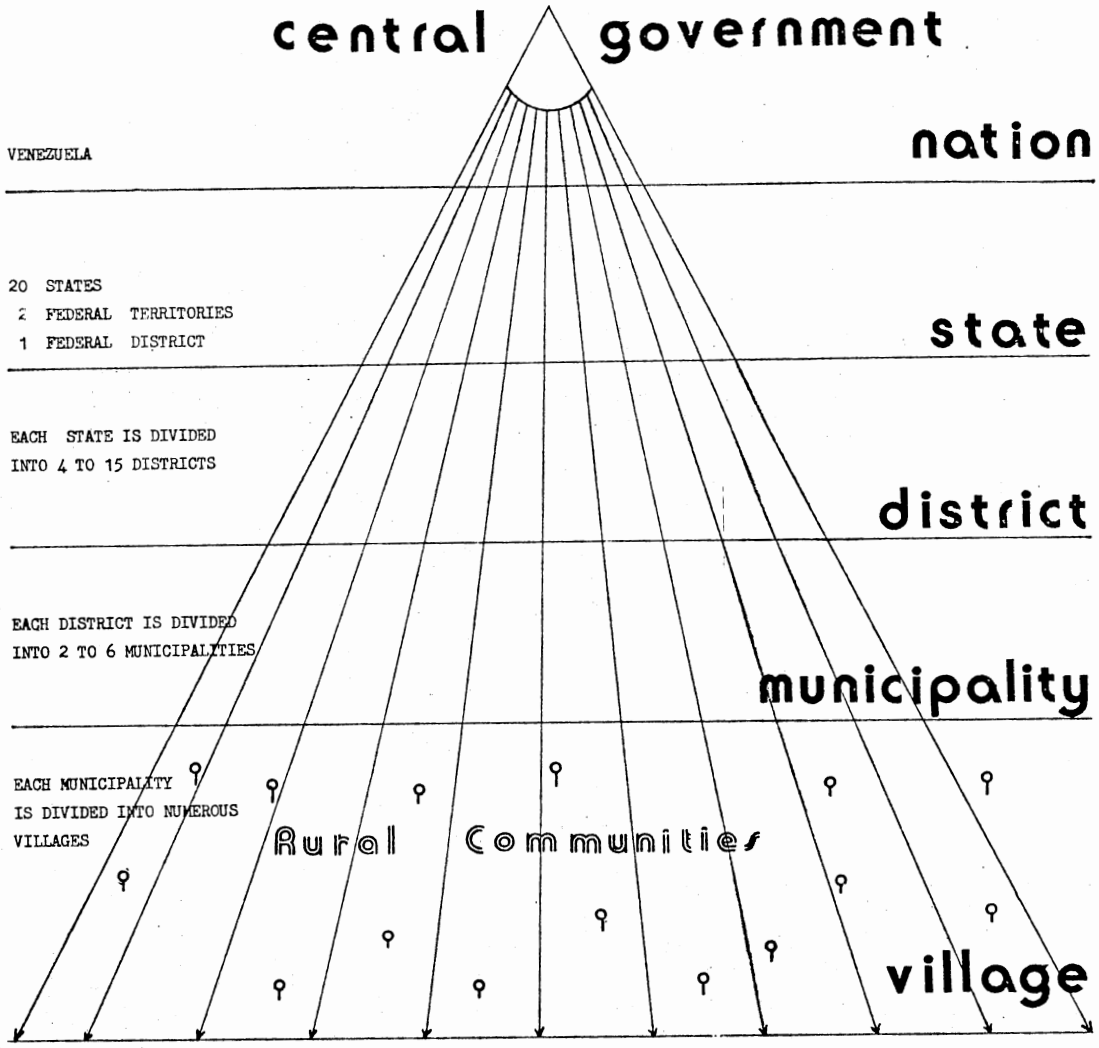


Figure 1. Political Subdivisions of Government in Venezuela.

Development

There are many sources of information designating the title "Development" in general terms. By and large, almost all occur in a context directed toward enhancing actions for improving the well-being of people.

Barret (6, p. 805) describes development as: "A process of progressive change in attaining individual and community interest through an expanded, intensified, or adjusted use of available resources."

While Good (3, p. 123) defines development as: "Growth or change in structure, function, or organization, constituting an advance in size, differentiation, complexity, integration, capacity, efficiency, or degree of maturity . . ."

More specifically, Tweeten and Brinkmann(7) further describe development as:

> . . . a dynamic goal, because measures to improve well-being, such as expanding the economic basic, improving services, or providing equality of opportunity shift in emphasis through time.(p. 4).

Therefore, the investigator would summarize and say at this point that the main themes of these definitions are change, progress, well-being, improvement of life systems, education, culture, health, production and in general strongly drive toward an effort to solve and/or improve economic and social problems.

Rural Community Development

Rural community development, as a term, differs from community development in that attention is focused more specifically in rural areas as contrasted with urban.

Phifer and List (8) state that:

> Community development is a rational process of inquiry and discovery whereby those comprising the community arrive at group decisions and take appropriate action to enhance the social, economic or cultural well-being of their community (p. 20).

Good (3, p. 119) defines community development as: "The effort of a community to identify its problems and to attempt to establish and reach its goals primarily through the application of the educational process."

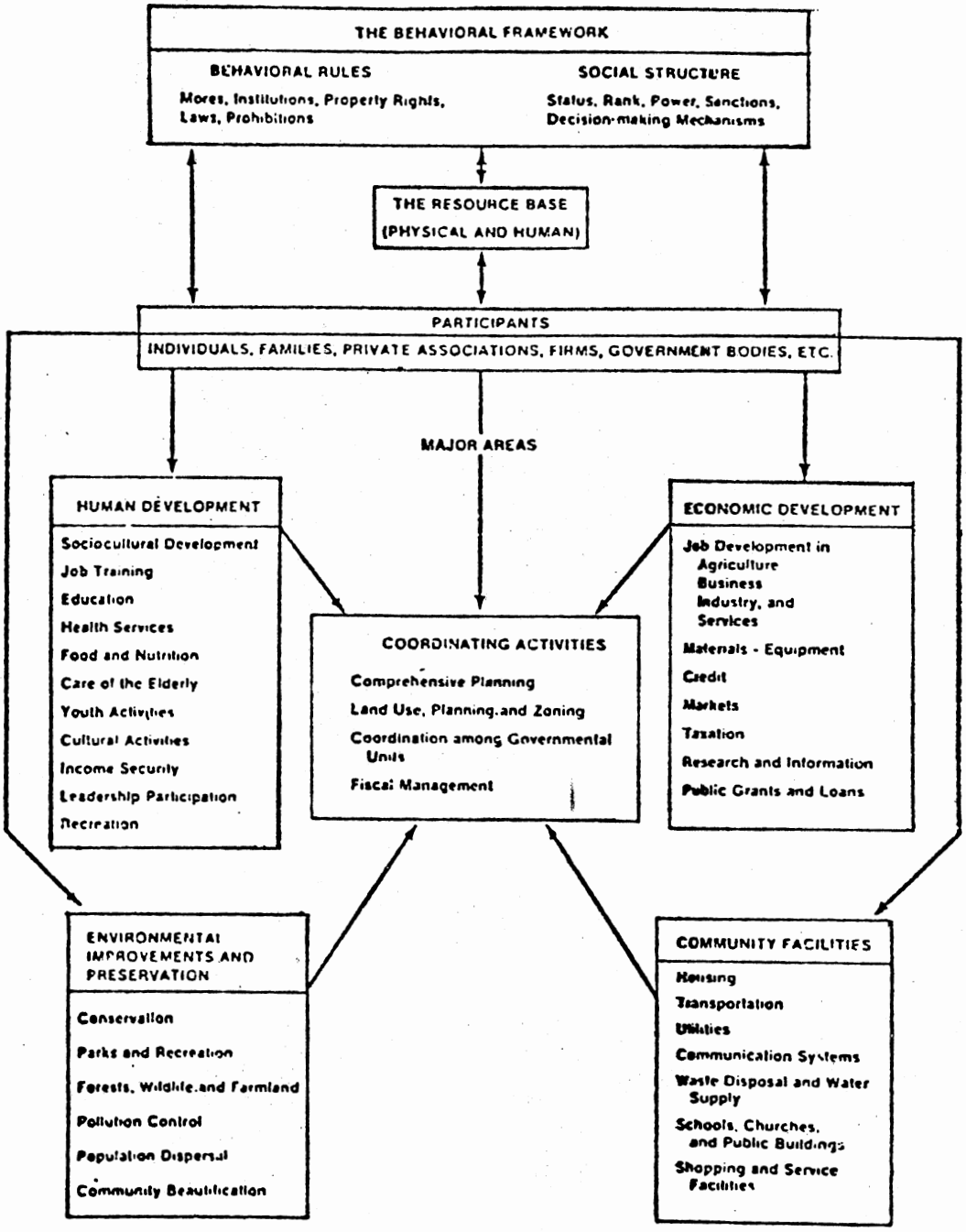
The investigator would posit the conclusion that rural development must consider the interdependence of all developmental sectors. These sectors include not only agriculture and industry but also transportation, trade, credit, health, education, culture, sport and leisure activities.

A model, shown as Figure 2, portrays Tweeten and Brinkman's concept of the interrelationship existing between various aspects of human development and community development and dramatically summarizes the behavioral framework in which development takes place. Also prominently identified are the resources base and participant relationships. The bottom portion of the figure summarizes the major areas of development (7).

Another general model of "Integrated rural development" is depicted in Figure 3, taken from a publication of the Food and Agriculture Organization (9). It should be noted that the so called core elements are identified as (1) Agricultural Production Development, (2) Human Resource Development, and (3) Non-Agricultural Production and Services Development.

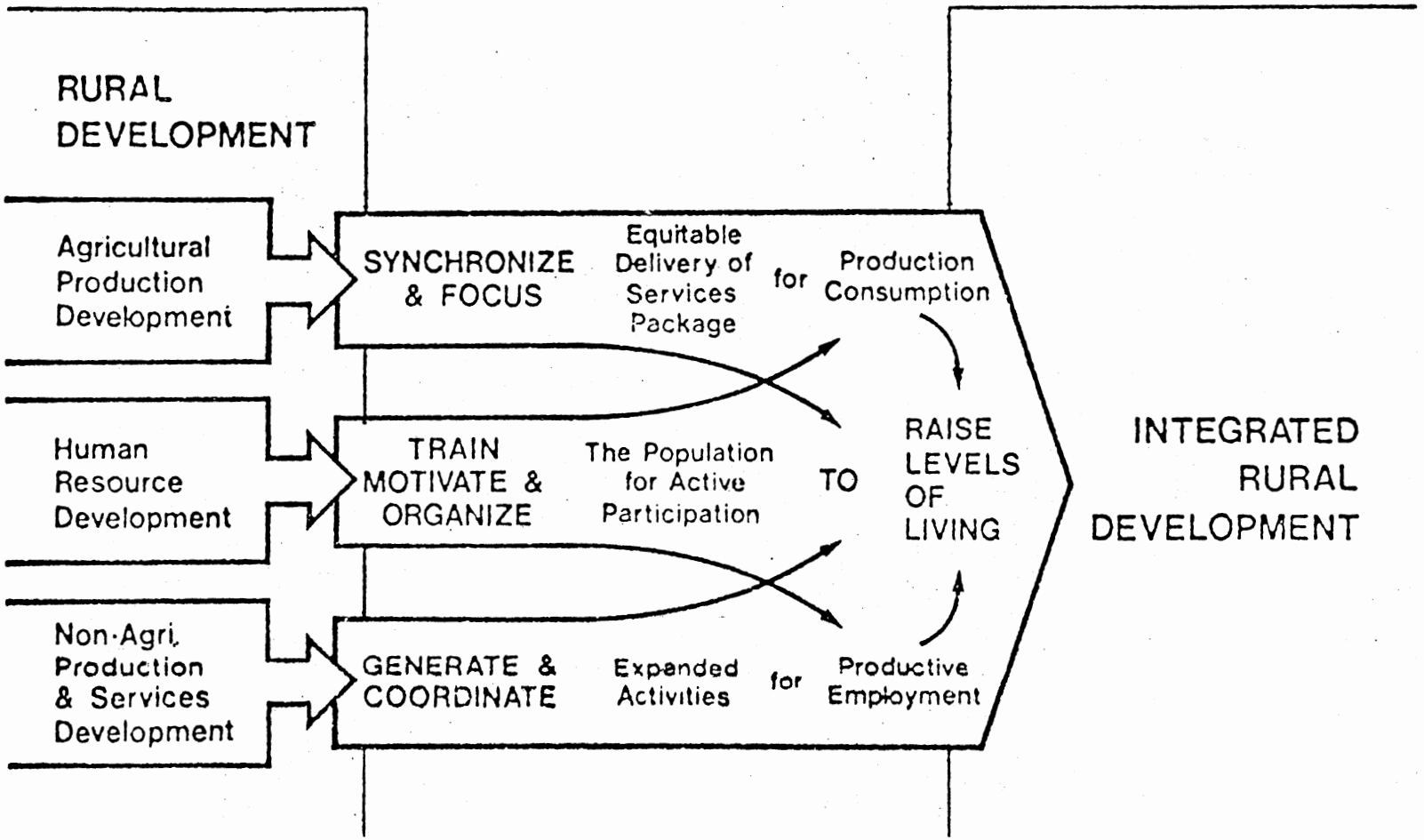
Education and Rural Development

In the context of rural development with focus on the rural poor,



Source: Luther Tweeten (7, p. 8)

Figure 2. Model for Rural Development.



Source: Food and Agriculture Organization (9, p. 3)

Figure 3. Core Elements in the Development of the Rural System.

education cannot be considered in the abstract or as an entity which is externally introduced in the mix of interrelated factors which comprise the strategy of rural development. Education systems, particularly as they have evolved in the developing countries, are not only urban-based and urban-biased but also are selective in a way which tends to militate against non-urban environments. For education to function as a force for social and economic transformation, its forms, methods and content would also have to be transformed at the same time.

According to an organization of UNESCO, Asian Programme of Educational Innovation for Development (10) there are two sets of educational activities related to rural development, categorized these as 'education in rural development' and 'education for rural development'.

> Education in rural development refers to activities, related to the role of teachers and other educationists, for effective implementation of the curriculum of the schools in a rural environment. Education for rural development, on the other hand, covers activities where educationists, community leaders and other groups are prepared to collaborate effectively with other agencies within a broadly-conceived multi-dimensional programme of rural transformation (p. 5).

Individual Leadership and as a Tool for Community Development

Rural community development must have individuals who assume positive roles to bring about and enhance rural community development. In an interview with Mister Larry Hodges made on his farm near Forgan, Oklahoma on March 23, 1981, the following experiences in and contributions to the program of development in the community of Forgan, located in Beaver County, Oklahoma were shared. Quoting Mister Hodges:

> I am very busy with my large farm and ranch operation, but in order for me to be happy and feel that I am making contributions to my community, I find that I must be involved in many

> activities not only related to my personal farming operations (11).

He then shared records of his activities for the past six months, as well as showed a number of awards and plaques which he had received honoring him in appreciation for his many wide-spread community activities. Among these were: personal assistance and support given to youth activities specifically the 4-H club, a certificate attesting to his services as a member of the County Agricultural Conservation and Stabilization Committee, membership on the original committee to encourage industrial development, work with/and services rendered to program of Mission and Hunger alleviation by the United Methodist Church, as well as numerous other agencies and organizations. One may conclude that rural community development might prosper to the extent that individual leaders within the community are able and willing to voluntarily assume numerous responsibilities. Quite often these individuals are highly successful in business and make personal sacrifices in order to participate in community development.

Present Situation with Regard to Rural Community Development in Venezuela

Currently, as a result of, but not confined to the agricultural sector, felt needs for more better skills in both social and economic areas have focused attention toward development of communities in the rural areas.

According to Coverdale (2):

> The rural sector is usually characterized by a shortage of skilled manpower, under-employment and labour/land imbalance, the predominance of subsistence farming, lack of capital, the shortage of institutions concerned with the necessities of

> rural development, the plethora of different authorities and the multiplicity of constraints engendered, and the fact that agricultural work is deemed servile and often held in contempt (p. 6).

Given the low rates of productivity and economic return, agriculture in Venezuela is an activity carrying somewhat limited attraction, particularly for youth. In a capitalist country like Venezuela, national investments of wealth and resources tend to be directed toward those sectors of the economy which, while promoting security, also encourage a major rate of gain. Such a situation inevitably directs human as well as material resources toward investment in those sectors producing the greatest rate of gain (12).

A phenomenon which consistently occurs in developing countries is the rapid growth of urban areas, brought on largely by exodus of population from rural areas. Certain more specific reasons for this ever increasing rate of migration from rural areas are suggested by Coverdale (2):

> The facilities available in the cities - electricity, transportation, water supplies, education, shopping, entertainment - are likely to compare favourably, however overburdened they may be, with those of the countryside. At the same time, the industries located in or around cities will probably provide workers with higher rewards for their labour than the kinds of jobs available in rural areas or small towns. Thus the decision to migrate to the cities is a rational one (p. 19).

Actually the population in Venezuela has reached approximately the 15,000,000 mark, of which the strictly rural area constitute slightly more than 2,500,000. The composition of that sector as well as the urban sector is shown in the Table I. It should be noted that the rural population in 1936 constituted 71.10% of the total, yet 30 years later was only 27.57%, and finally, in 1981 is determined as being reduced to only 17.23% of the total inhabitants of the country.

TABLE I

URBAN AND RURAL POPULATION OF VENEZUELA

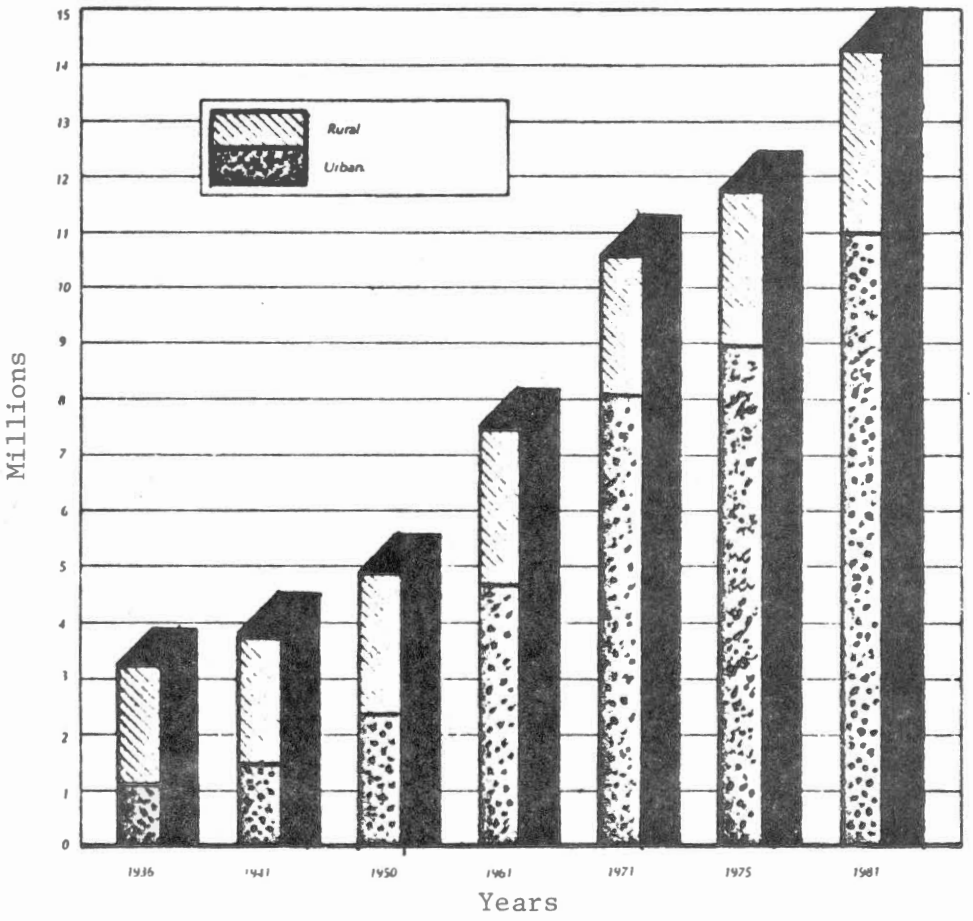
Years	Total	Urban Population No.	%	Rural Population No.	%
1936	3.364.347	971.903	28.90	2.392.444	71.10
1941	3.850.771	1.206.746	31.30	2.644.025	68.70
1950	5.034.838	2.411.811	47.90	2.622.827	52.10
1961	7.612.327	5.164.125	67.84	2.448.202	32.16
1962	7.872.266	5.415.740	68.80	2.456.526	31.20
1963	8.143.629	5.678.751	69.73	2.464.878	30.27
1964	8.426.799	5.953.540	70.65	2.473.259	29.35
1965	8.722.212	6.240.544	71.55	2.481.668	28.45
1966	9.030.330	6.540.224	72.43	2.490.106	27.57
1967	9.351.602	6.853.030	73.28	2.498.572	26.72
1968	9.686.486	7.179.419	74.12	2.507.067	25.88
1969	10.035.435	7.519.844	74.93	2.515.591	25.07
1970	10.398.907	7.874.763	75.73	2.524.144	24.27
1975	12.433.970	9.866.623	79.35	2.567.347	20.65
1981	15.202.626	12.582.459	82.77	2.620.167	17.23

Source: Moya & Moya, Geografía Económica (13, p. 67)

The presentation in Figure 4 describes graphically the notable phenomenon of the accelerated concentration of the population in cities, and unfortunately, the decreasing numbers of people residing in rural Venezuela.

Position of Agriculture Among Sectors and Their Subdivisions of the Venezuelan Economy

In Venezuela, as is true in many societies and developing countries, there exists a disproportion among the percentage of the active population occupied in the primary, secondary, and tertiary sectors and the part of the population receiving a substantially lower proportion of the national income. In the rural areas the occupation of the people is largely that of agricultural activities; however, because of the migration factor, the tendency for this phenomena is decreasing each year. This information summarized and presented in Table II largely deals with reports and estimations of the active population of Venezuela, classified according to areas of economic activity. It should be noted that agricultural activity in 1941 was distributed in such a manner as to involve the major active population within the national context of Venezuela constituting 51.2%. This percentage decreased to only 21.29% by 1974; the services activity sector had replaced agriculture as first with 27.1% for the population in this category. At the time the survey was made in 1974, the projection shown for 1980 was even more significant; the services sector was now in first place, but with a percentage increased to 31.33%, successively the manufacturer industry sector with 19.13% of the population, third the commerce sector with 16.82%, while now fourth place the agricultural sector with the greatly reduced



Source: Moya and Moya, Geografía Económica (13, p. 67)

Figure 4. Urban and Rural Population of Venezuela.

TABLE II

REPORTS AND PROJECTED ESTIMATES AS TO PERCENTAGES OF THE ACTIVE POPULATION OF VENEZUELA CLASSIFIED ACCORDING TO ECONOMIC ACTIVITY SECTORS

SECTOR	ACTIVITY	1941	1950	1959	1963	1971	1974	1975	1976	1977	1978	1979	1980
I	Agriculture	51.2	44.1	37.8	35.30	21.1	21.29	20.62	19.75	18.90	18.06	17.23	16.41
	Petroleum and Mines	1.9	2.8	2.4	1.70	1.6	1.6	1.33	1.29	1.24	1.19	1.15	1.11
II	Manufacturer Industry	14.1	10.8	11.8	12.50	18.5	18.0	17.52	17.89	18.27	18.57	18.85	19.13
	Construction	2.5	5.7	8.4	5.30	5.9	6.6	6.46	6.51	6.57	6.63	6.69	6.75
	Electricity, Gas and Water	-	0.3	0.5	0.60	1.5	1.5	1.67	1.76	1.85	1.84	1.82	1.81
III	Commerce	8.1	9.3	11.3	11.90	18.8	17.0	15.83	16.03	16.22	16.43	16.61	16.82
	Transport and Communication	5.1	3.3	3.8	3.90	6.7	6.3	5.52	5.69	5.85	6.12	6.38	6.65
	Services	17.1	23.7	23.6	27.30	25.9	27.1	31.05	31.08	31.10	31.16	31.27	31.33
	TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Saide de Moya and Oswaldo Moya. Geografia Economica de Venezuela. (13, pp. 46-51)

percentage of 16.41%. Also, it is evident that only the agricultural activity sector has exhibited a marked decrease while the other activity sectors have, in general, maintained a rather consistent increase. Exceptions are petroleum and mines, and electricity, gas, and water due to the pressure to adequately supply the high qualified manpower needed in these areas; these sectors show moderate increase early with slight decrease for projected years.

Presentations shown in Table III portray the Gross National Product of Venezuela by these same economic sectors. These data would seem to clearly substantiate the alleged precarious support of efforts by the agriculture activity sector. This assertion is validated in the fact that the contribution of agricultural production to the Gross National Product, percentage wise has been decreasing almost every year.

The assertion is sometimes made that maintenance and progress in other sectors is quite largely dependent upon the petroleum and mines subdivision of the primary sector. The importance of this subdivision is brought about by the strong support provided in keeping the G.N.P. in a favorable position within the world community. According to Moya and Moya (13, p. 173), "Expectations strongly support the foreknowledge that petroleum must continue maintaining its preponderant position in the economic dimension of Venezuela . . ."

The rural situation in Venezuela can only be as alarming if credence is given to an inventory made by the National Agrarian Institute in 1977. This pertinent information was compiled by Isbelia de Segnini (15). An initial effort directed toward agrarian reform was constituted by a law approved by the National Congress on February 22, 1960. Seventeen years after this action was taken the National Agrarian Institute

TABLE III

PERCENTAGES OF CONTRIBUTION TO THE GROSS NATIONAL PRODUCT OF VENEZUELA BY ECONOMIC SECTOR

Economic Sector	1960	1971	1972	1973	1974	1975
Primary Sector						
Agriculture	7.0	6.64	6.24	6.02	4.42	5.60
Petroleum	20.4	18.46	18.35	22.11	37.00	28.90
Mines	1.4	1.14	0.93	1.16	0.94	0.96
Primary Sector Total	28.8	26.25	25.51	29.29	42.36	35.46
Secondary Sector						
Manufacturer Industry	14.9	16.52	17.14	17.69	19.53	16.49
Construction	5.9	4.09	4.89	5.02	3.48	5.01
Energy	0.8	1.67	1.50	1.37	0.93	1.13
Secondary Sector Total	21.6	22.22	23.53	24.07	23.94	22.64
Tertiary Sector						
Transport and Communication	3.5	10.30	10.73	9.68	6.79	8.62
Commerce	17.6	23.13	22.26	20.30	14.13	17.09
Services	28.5	18.10	17.97	16.66	12.78	16.09
Tertiary Sector Total	49.6	51.53	50.96	46.64	33.70	41.91
Grand Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: Banco Central de Venezuela, Informe Económico, 1975 (14, p. A-141)

reportedly was found to be largely unproductive. However, it should be understood that these data are given only with reference to the open countryside and smaller villages.

Approximately one-half of those (150,000 families) needing assistance reside either as legal owners or as occupants of parcels of ground. Of these 150,000 families having been given some assistance, only 21% are found to be legal owners; however, 78.5% of the 150,000 families are occupying portions of undesignated land. In Venezuela, occupancy for a period of five years or more gives certain rights. As an example, a pisatario living on a parcel of land, for four or five years, without a written contract has a right to retain his occupancy for an indefinite period. Sometimes the owner "redeems" his property by paying the occupying pisatario a fee.

Permanent housing and improvements of "ranchos" and farms are often found in a dilapidated or run down condition. In fact, the report of the National Agrarian Institute reveals that 27% of rural families do not enjoy the service of an adequate sanitary disposal system. Even more depressing is the finding that 71% of the farm families are without potable water; 64% lacked electricity; while 52% had minimal or less than minimal health care.

The survey further revealed that the pattern of work is characterized by individual family differences extant in the respective village or community. For example, it was determined that only 9% tend to operate within the pattern of a collective form.

Among these same 150,000 rural families it was found that 35% of the work effort was expended in production of food-stuffs for consumption by the peasant and his family. The level of income was far too low, with

only 36% of the heads of families reporting income in excess of $70.00 monthly. Results of the survey revealed further that while 38% reported income of less than $70.00 monthly, a remaining 26% did not respond to this question.

Income received was reported to largely come from proceeds of crop sales of which approximately one-half was made to state corporations, with the remainder being sold to middle men and to merchants in the vicinity.

Peasants distribute the income received from merchants in payment for food, dress, transportation, medicine, acquisition of needed equipment, seed, fertilizer, etc. Some also made payments for the services of agricultural laborers.

Another pertinent fact determined through the survey was that 31% of reporting families had little access to schooling for their children. It was worthy of note that over one-fourth of the responding parents indicated little, if any concern, for expending effort to keep their children in school.

Actually, the average rate of illiteracy at the national level is 17%. However, in the rural areas it is much higher. Primary school, especially in the more remote areas, even when existing, is often incomplete, generally reaching only through the third grade. Far too often there exists a complete lack of instructional programs for children in middle education.

The ill-advised and often meager cultivation results in soil exploitation. Few fields receive more than a base minimum of tillage and care, abandoned fields and gardens often predominate with the once cropped areas now taken over by weeds and grasses of little usage.

In fact, findings indicate that 51% of the peasants and their families continue to use rudimentary and out dated practices in their farming operations. More than one-half (55%) reported that they are unable to receive technical assistance, while 70% of the farms are lacking equipment for irrigation. Further less than 53% felt they had adequate access to markets during winter season.

According to Hello Castejon's more recent survey (16) conducted in 1980, citing 2 and 20 years after passage of the Agrarian Reform Law, records of the National Agrarian Institute show that between 1977 and 1980 an additional 15,000 families have been placed on "a parcel" of ground. This would mean that now there are 165,000 families enjoying some degree of independence as agricultural producers. This later survey also reveals that more than 30% of the 165,000 campesinos abandoned their parcels and subsequently migrated to urban areas looking for new jobs. Therefore, one may conclude that of the remaining 65% continuing to live on those parcels of land must have living conditions slightly above those experienced before the Agrarian Reform, but still often with little credit extended. Further they receive a minimum of technical assistance, continuing to attempt production at the expense of not having many services which might enable the campesino and his family to live more humanely in the countryside.

In summary, this review of economic and social conditions make the conclusion inescapable that the families of campesinos suffer by comparison with other citizens. Accomplishment of "Agrarian Reform" is absolutely essential. Incentives must be provided, but such provision must be within the context of the complete economic and social milieu of the rural sector. For above all, the prestige of agriculture and rural

living must be developed and encouraged. This must be done in order that that agriculture can at least in part regain the place formerly occupied before the era of petroleum production so dominated the economy through development as the principal source of income for the nation. At this point consideration must be given to the fact that petroleum resources are certainly non-renewable as contrasted with agricultural resources which, through wise use, are readily renewed.

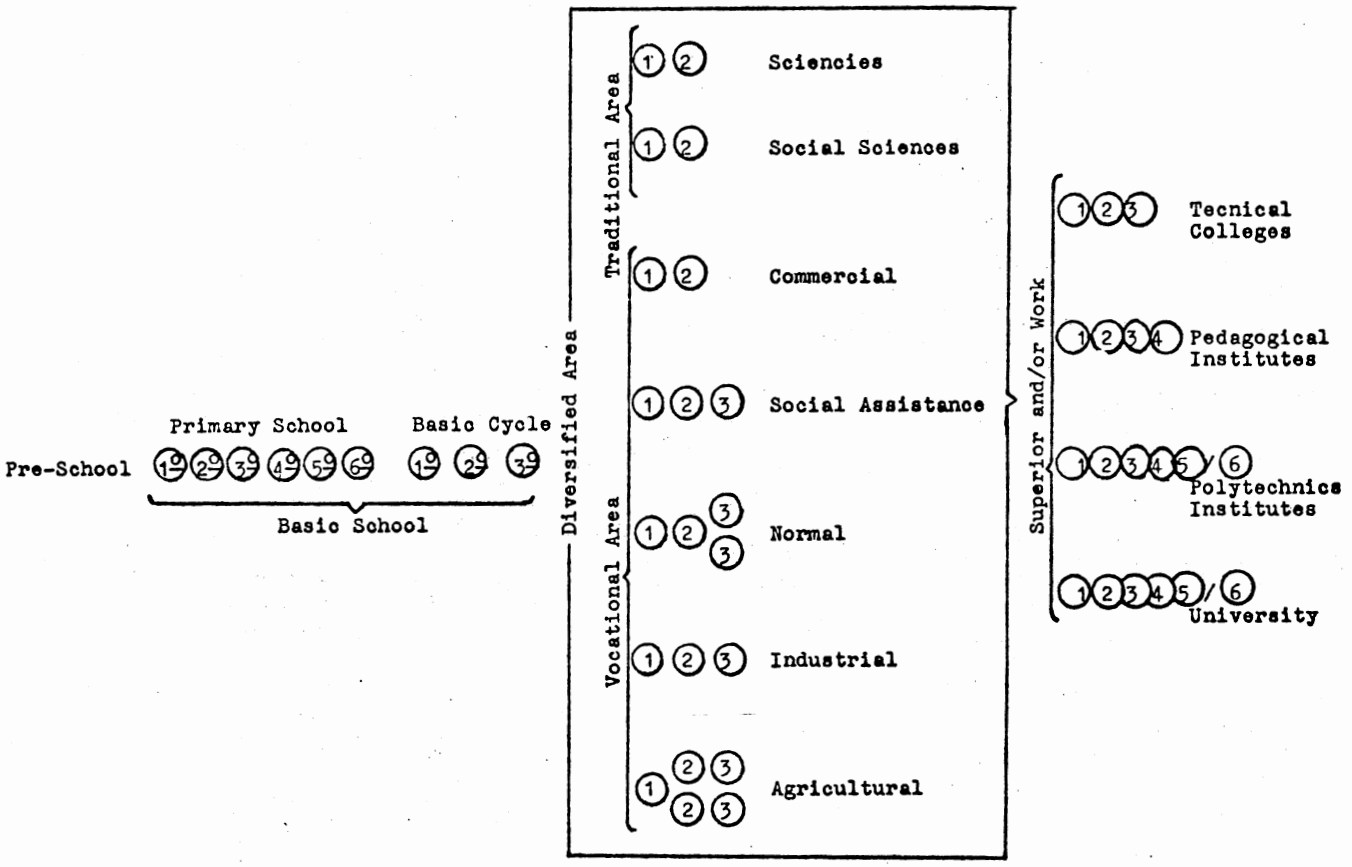
Pertinent Facets of the Educational System of Venezuela

Education at all levels of public learning institutions is gratuitous, with enrollment and teaching expenses paid by the government.

As detailed by Decreto 120 y 136 del 13-8-69 (17, p. 3) the educational system of Venezuela is divided into the following levels, as shown in Figure 5. These are listed as:

1. Pre-School (Length of study period: 1-4 years) for children 2 to 6 years of age.
2. elementary School (length 6 years) from 7 years old.
3. High School
   a. Basic Cycle (Length 3 years)

The high school basically is offered for all the high school students regardless of the area of specialization or major that the student selects. The basic cycle provides a variety of vocational courses that are called exploration area. These areas are for the purpose of introducing the student to the different vocational courses as careers and vocation, guidance before selecting a career, after that he enters to the diversified cycle.



Source: Perez O. Enrique. Nuevos Aportes a la Reforma Educativa. (18, p. 73)

Figure 5. Structure of Educational System of Venezuela.

b. Diversified Cycle.

1. Traditional area (Length 2 years).

a. Social Science

b. Science

2. Vocational areas (Length 2 or 3 years)

a. Commercial (2 years). This vocational area has the following majors:

1) Accounting

2) Marketing

3) Typewriting

4) Tourism

b. Social Assistance (Length 3 years). The majors are:

1) Infirmary

2) Social Work

3) Home Economics

c. Normal (Length 3 years). Training Teachers in the majors:

1) Pre-school

2) Primary

d. Industrial (Length 3 years)

1) Mechanics

2) Electricity

3) Metallurgy

4) Topography

5) Petrochemical

6) Chemical

e. Agriculture and Livestock (Length 3 years)

1) Animal Science

2) Plant Science

3) Food Process Technology

4) Agricultural Mechanics

5) Fishing and Seafood Processing

4. Superior (a designated level)

a. Technical College (Length 3 years). This area has the following majors:

1. Commercial

2. Social Assistance

3. Industrial

4. Agriculture and Livestock

The name of the Institutions are: Technological University Institutes, and University Colleges.

b. University (Length 4-6 years)

Names of these institutions are:

1. Experimental Pedagogical University Institutes (4 years, as an example data in Table IV presents the fields of study of one Pedagogical Institute).

2. University Polytechnic Institutes (4-5 years, depending on the field of specialization).

3. University (5-6 years, Table V shows the fields of study of largest of the universities).

TABLE IV

FIELDS OF STUDY OFFERED BY EXPERIMENTAL PEDAGOGICAL UNIVERSITY INSTITUTE OF BARQUISIMETO

Date of Founding and Control: 1960
Public Enrollment, 1978-1979: 4,871 students

Fields of Study	Length Semesters
Spanish Language	8
Spanish Literature	8
English	8
Mathematics	8
Social Sciences	8
a. Geography	8
b. History	8
Biology	8
Chemical	8
Physics	8
Physical Education	8
Commercial Education	8
Industrial Education	8
a. Mechanics	8
b. Industrial Arts	8
c. Electronics	8
d. Electricity	8
Agricultural Education	8
a. Animal Science	8
b. Plant Science	8

Source: Catalog of Experimental Pedagogical University Institute of Barquisimeto, 1979 (19, p. 7).

TABLE V

FIELDS OF STUDY OF THE CENTRAL UNIVERSITY OF CARACAS, VENEZUELA

Date of Founding and Control: 1721
Public Enrollment, 1975-1976: 51,130 students

Fields of Study	Length (Semesters)
Accounting Public	10
Actuarial Science	10
Anthropology	10
Architecture	10
Bioanalysis	10
Business Administration	10
Chemical Engineering	10
Chemistry	10
Computer Science	10
Civil Engineering	10
Dentistry	10
Economics	10
Education	10
Electric Engineering	10
Geodesic Engineering	10
Geography	10
Geological Engineering	10
History	10
Hydrometeorogical Engineering	10
International Studies	8
Law	5 years
Library Science	10
Languages and Literature	8
Mass Communications	10
Modern Languages	10
Mining Engineering	10
Occupational Therapy	5
Pharmacy	10
Philosophy	10
Physics	10
Physical Therapy	10
Political Studies	10
Psychology	10
Social Work	10
Statistics	10
Translation and Interpretation	10

Source: Catalogo de la Universidad Central de Venezuela (20, p. 5).

Structure and Function of the Venezuelan Ministry of Education

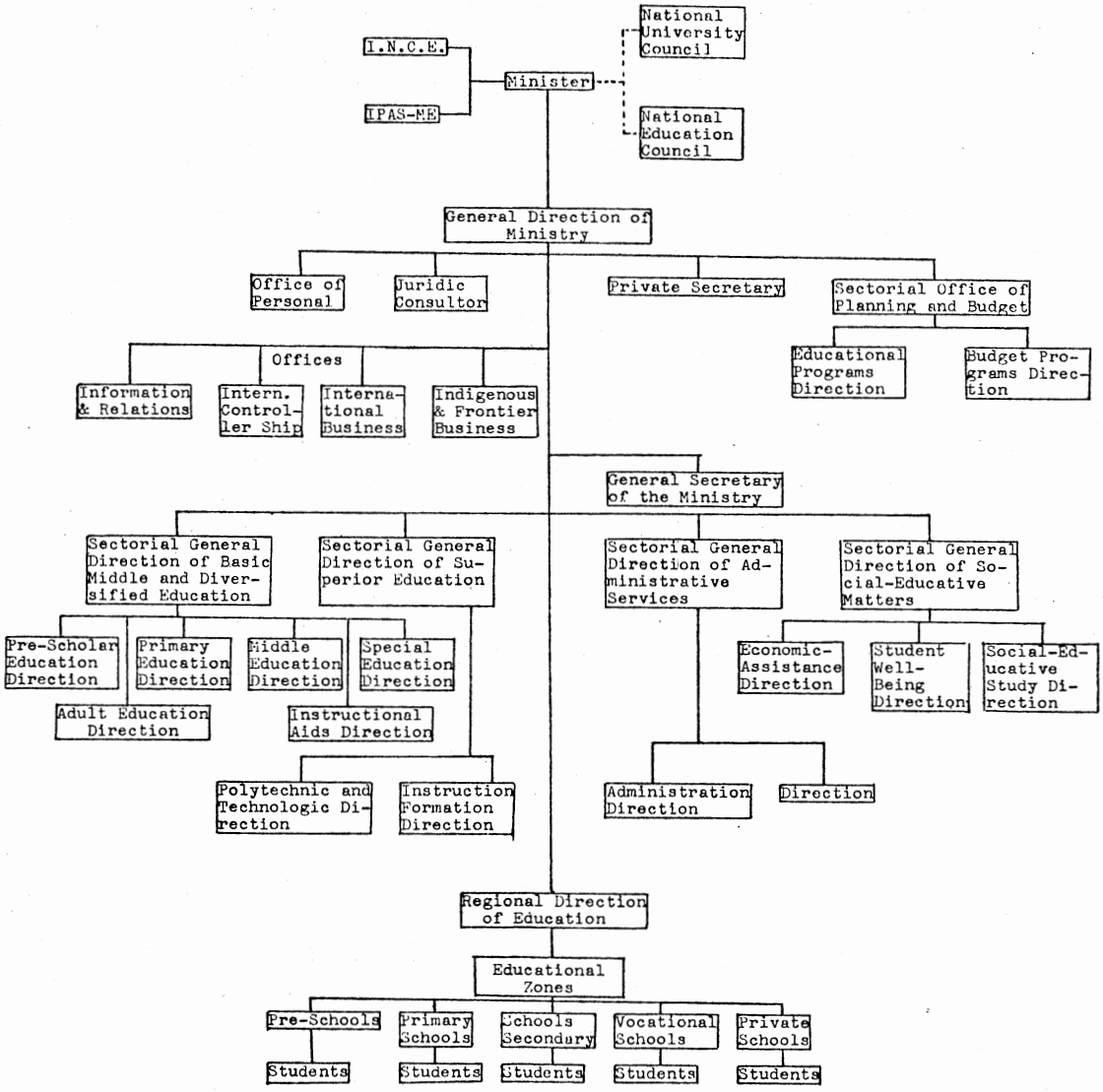
The Ministry of Education, operating as an integral part of the Central Government with the principal office in Caracas, has legal responsibility for all public education in the nation, as well as supervisory responsibility for private education. A network of offices providing supportive services is also provided in the capital city. In each of the nine regions of the country is found an office of the Ministry operating to administer and support educational institutions in the various zones comprising the respective region. Data presented in Figure 6 depict the general structure of the Ministry of Education in Venezuela.

Structure and Function of Agricultural Education in the Vocational Schools of Venezuela

Presently three types of curriculum content are offered in the secondary agricultural educational system of Venezuela. Although these were implemented in different schools successfully from 1969 to the present not all schools chose to make changes in programs according to respective governmental decrees; therefore, we find existing three separately identified kinds or types of systems for instruction or combinations of them: (1) the diversified cycle with optional nucleus, (2) the semester credit system, and (3) the agricultural technical school.

Although the first of these, the diversified cycle program which was established in 1969, attempted to achieve improvements in agriculture in vocational schools.

A brief review of the historical background reveals that it was in



Source: Memoria y Cuenta del Ministerio de Educacion 1979. (21, p.2).

Figure 6. General Structure of Ministry of Education of Venezuela.

1938 when vocational secondary schools were first founded. The first two such schools were called, Practical School of Cafeteros (Coffee) of Bramon in the Tachira State, and Home Economic School of Gonzalito in the Aragua State. These schools were dependent upon the Ministry of Agriculture and Livestock for organization, administration and operation (22).

> For the first time in the history of the Venezuelan Educational System, the program of study for the rural schools specified that the knowledge to be imparted must give due consideration to the conditions of the environment and its inhabitants. Teaching of subjects foreign to the reality being lived, such as was the tradition in the urban schools, was to be discarded (23, p. 130).

In 1958 with the Decreto 189 del 30-04-1958 the Venezuelan government created an official body to function under the direction of the Ministry of Education. A major expectation of this action was that the newly established body called Direction Artesanal Industrial y Commercial would achieve a greater degree of centralization for technical education. At the same time the Ministry of Education also established four technical high schools. Each offered four years of training. The title given to graduates of these schools was Peritos Agropecuarios (24).

Vocational and technical education including agriculture functioned somewhat effectively in Venezuela until 1969. In August 1969 the government in turn created, by Decreto N^{O} 120, (17) Venezuelan secondary education structured in two cycles as was noted earlier. At this time the previously established agriculture technical high schools were discontinued and reorganized according to the so-called "diversified cycle" which allowed the several agricultural fields to be more specifically defined. The degree obtained through this program was called "Bachiller

Agricola" (24, p. 59). Data presented in Table VI and Table VII show the plan of study for Agricultural Education by Diversified Cycle and the Optional Nucleus. Unfortunately, this legislation tended to actually be decidedly less practical, with emphases on more theoretical learning. As was alleged by the Comisión Nacional para el Desarrollo de la Educación Rural de Venezuela (25).

> Agricultural diversified study programs are excessively theoretical and would seem to avoid or ignore the need to provide training based upon the professional conditions that exist. Such training fails to provide the learning and skills demanded in further process of rural development. Therefore, the employing organizations that require much services of them often decide that they can well do without these graduates (p. 28).

When recognition was given to the problem described above, and also consideration given to other problems of like nature, the need for reform and development of a truly professional program was more widely accepted. In 1977 the agricultural technical high schools, previously operating as early as 1958, were once again opened. The reformed programs which were instituted included: (1) name changes from the diversified cycles in agriculture to the agricultural technical high schools, (2) years of study changed to designated semester of credit, and (3) the required length of study period changed from a three years designation to a six semesters one (27).

Essential elements of the curriculum for vocational technical high school (credit-semester plan) is shown in Table VIII.

The third type of curriculum of course study was established in 1979, is known as the new Agricultural Technical School, in this plan the unit period of study has been designated by year, and is further subdivided into sectors: (1) basic formation cycle (length of period of study, 3 years) and (2) professional cycle (length, 2 years). An

TABLE VI

PLAN OF STUDY IN AGRICULTURAL EDUCATION
BY DIVERSIFIED CYCLE

Courses	Week Hours 1st Year	2nd Year	3rd Year
Common Core Areas for All Majors.			
Spanish and Literature	3	-	-
Mathematics	4	-	-
History of Venezuela	4	-	-
Geography of Venezuela	-	3	-
English	3	3	-
Physical Education	1+1	1+1	-
Professional Core Areas Majors: Animal Science, Plant Science, and Agric-Mechanics.			
Biologic Sciences	4+2	4+2	-
Mathematics	-	4	-
Physics	4+2	4+2	-
Chemical	4+2	4+2	-
Agricultural Mechanics	-	4	-
General Agricultural	3	-	-
General Zootechnics	3	-	-
Agricultural Economic	-	-	4
Natural Resources Concervation	-	-	3
Optional Nucleus	-	6	17
Training Experience	-	-	11
Total	24	32	35

Source: Gaceta Oficial No. 30.125 Junio 1973 (26, p. 5)

TABLE VII

COMPOSITION OF OPTIONAL NUCLEUS BY MAJORS

(Animal and Plant Science and Agriculture Mechanics)

Majors: Animal Science and Plant Science
Optional Nucleus: Forage

Majors: Plant Science and Agriculture Mechanics
Optional Nucleus: Irrigation and Drainage
Enterprise: Soil, Topography, Irrigation and Drainage

Major: Animal Science:
- Livestock Care and Management
- Swine Production
- Aviculture
- Food Process Technology

Major: Plant Science:
- Sugar Cane
- Coffee
- Horticulture
- Fruitful
- Leguminous
- Oleaginous
- Cereal
- Textile

Source: Gaceta Oficial No. 30.125, Junio 1973 (26, p. 6).

TABLE VIII

PLAN OF STUDY OF SECONDARY AGRICULTURAL EDUCATION BY PLAN FOR SEMESTER-CREDIT

Majors: Animal Science and Plant Science

Common Semesters

Courses	Week Hours 1st Semester Theory	1st Semester Pract.	2nd Semester Theory	2nd Semester Pract.
Spanish and Literature	3	-	-	-
Mathematics	4	-	3	-
History of Venezuela	3	-	-	-
Geography of Venezuela	-	-	3	-
English	3	-	-	-
Physical Education	-	2	-	-
Chemical	2	3	2	3
Botany	2	3	2	3
Zoology	2	3	-	-
Physics	-	-	2	3
General Agriculture	-	-	2	3
General Zootechnics	-	-	2	3
Agricultural Mechanics	-	-	2	4
Expra-Academical Area	-	2	-	2
Total	19	13	18	21

TABLE VIII (Continued)

Major: Plant Science

Courses	Week Hours							
	3rd Sem.		4th Sem.		5th Sem.		6th Sem	
	Theor	Pract	Theor	Pract	Theor	Pract	Theor	Pract
Applied Chemical	2	4						
Soil and Fertilizers	3	3						
Introd. to Agric. Research	2							
Agricultural Economic	2	2						
Plant Propagation	2	2						
Plant Physiology	2	3						
Natural Resources Conservation			2	2				
Topography			2	3				
Crop Plants I, II, III, IV			2	4	2	4	4	8
Meteorology			2	2				
Entomology			2	3				
Plant Pathology			2	3				
Agricultural Extension					2	2		
Rural Legislation					2			
Rural Administration					2	2		
Irrigation and Drainage					2	3		
Rural Construction					2	2		
Weed Crop Plant Control					2	2		
Training Experience								20
Extra-Academic Area		2						
Elective							2	4
Total	13	16	12	17	14	15	6	32

TABLE VIII (Continued)

Major: Animal Science

Courses	Week Hours							
	3rd Sem.		4th Sem.		5th Sem.		6th Sem.	
	Theor	Pract	Theor	Pract	Theor	Pract	Theor	Pract
Applied Chemical	2	4						
Soil and Fertilizers	3	3						
Introd. to Agric. Research	2							
Agricultural Economic	2	2						
Animal Anatomy	2	2						
Animal Physiology	2	2						
Natural Resources Conservation			2	2				
Topography			2	3				
Food Conservation			2	2				
Livestock, Care & Management I, II, III			2	4	2	4	2	4
Animal Health			2	2				
Animal Feeding			2	3				
Agricultural Extension					2	2		
Rural Legislation					2			
Rural Administration					2	2		
Irrigation and Drainage					2	3		
Rural Construction					2	2		
Forage Crops					2	3		
Animal Improvement							2	2
Training Experience								20
Elective							2	4
Extra-Academic Area	2							
Total	13	15	12	16	14	16	6	30

Source: Ministerio de Educacion, Resolucion No. 8 1978 (27, p.p. 2-3-4)

additional feature of this system was that students satisfactorily completing primary school were granted entrance (25).

Data presented in Table IX show the plan of study of the agricultural technical system, which includes both the Basic Formation Cycle and the Professional Cycle.

It is important to note that still there are various schools operating with one or more of the three systems (a) Diversified Cycle, (b) Credit-Semester, (c) Technical School.

Data depicted in Table X show a list of the high schools in agricultural education, and their respective major and applied system (s). Figure 7 shows a map of Venezuela which more specifically locates these schools.

A typical vocational agriculture school has two major study area specialties instead of the five listed for earlier types of schools. School facilities and equipment often include:

1. The school farm serves as a laboratory where the teachers are in charge of the technical, educational work, and advice but are not allowed to participate in the administrative work of the school farm. The school farm has land to be used as a teaching tool and in the production of crops and pastures.

2. Buildings and equipment as may be needed, according to the requirements of the curriculum. Often these include: dairy processing laboratory, proper stables for cows, agricultural mechanics, soil laboratory, chemistry laboratory, poultry building, and swine building and the libraries.

3. The school services may also include a medical center which provides a doctor, two nurses, and a dentist.

TABLE IX

PLAN OF STUDY FOR AGRICULTURAL TECHNICAL SCHOOLS BASIC CYCLE

	1st Year Week Hours		2nd Year Week Hours		3rd Year Week Hours	
Courses	Student	Teacher	Student	Teacher	Student	Teacher
Spanish and Literature	4	4	4	4	3	3
Mathematics	4	4	4	4	3	3
Geography and History	4	4	4	4	3	3
Biologic Sciences	2 + 2	6	2 + 2	6	2 + 2	6
Chemical	-	-	-	-	2 + 2	6
Physics	-	-	-	-	2 + 2	6
English	3	3	3	3	3	3
Social, Moral and Civic Form.	1	1	2	2	-	-
Physical Education (*1)	2	4	2	4	2	4
Artistic Education	-	-	2	2	-	-
Agricultural Formation (*2)						
Agriculture	5	10	5	10	4	8
Livestock	5	10	5	10	4	8
Agricultural Mechanics	4	8	4	8	6	12
Total	36	54	39	57	40	62

(*1 & *2) Courses divided in two groups.
Source: Ministerio de Educacion, Resolucion No. 53, 1978. (28, p.1)

TABLE IX (Continued)

Majors: Plant Science
Animal Science

Courses	1st Year Week Hours Student	1st Year Week Hours Teacher	2nd Year Week Hours Student	2nd Year Week Hours Teacher
Common				
Spanish and Literature	3	3		
Mathematics	4	4	3	3
History of Venezuela	4	4		
Geography of Venezuela			3	3
English	3	3		
Physical Education	1	2	1	2
Physics	2 + 2	6	2 + 2	6
Chemical	2 + 2	6	2 + 2	6
Rural Constructions	3	6		
Agricultural Extension			3	3
Agricultural Administration			2	2
Conservation of Nat. Res.			2	2
Elective			3	6
Training Experience*				20
Plant Science (1)				
Forage	2	4		
Soil and Fertilizers	2 + 2	6		
General Crops Plants	4	8	6	12
Plant Pathology and Entomology			2 + 2	6
Topography, Irrigation and Drainage			2 + 2	6
Plant Anatomy and Physiology	2 + 2	6		
Animal Science (2)				
Biologic Sciences	2 + 2	6		
Animal Anatomy and Physiology	2 + 2	6		
Animal Improvement			3	3
Livestock Care & Management	4	8	4	8
Forage			3	6
Food Process Technology			4	8
Total (Each Major)	(1)40,(2)38	(1)58,(2)54	(1)&(2)39	(1)77,(2)78

* Minimum 6 Weeks

Source: Ministerio de Educación. Planes de Estudio 1980-1981. (29, pp. 2-3)

TABLE X

HIGH SCHOOLS OF AGRICULTURAL EDUCATION IN VENEZUELA

School	State of Location	MAJORS: Animal Science	Plant Science	Food Process Technology	Agricult. Mechanics	Fishing and Sea Food Processing	SYSTEMS: Diversified Cycle	Credit Semester	New Technical School
1. Gervacio Rubio	Tachira	X	X				X	X	X
2. S. Jose de Bolivar	Tachira	X	X					X	
3. Tulio F. Cordero	Tachira	X	X					X	
4. F. Aramendi	Apure	X						X	
5. D. E. Chacon	Apure	X						X	
6. J. Nucete Sardi	Merida		X					X	
7. E. Baptista	Trujillo	X	X				X	X	X
8. S. de Mendoza	Trujillo	X	X				X	X	X
9. San Luis	Falcon	X	X				X	X	X
10. S.J. de L. Cayos	Falcon								X
11. Aregue	Lara	X						X	
12. Cuara	Lara		X					X	
13. F. Medina	Lara		X					X	
14. Turen	Portuguesa		X					X	
15. Agua Blanca	Portuguesa	X	X				X	X	X
16. Crisanto Lacruz	Portuguesa		X					X	
17. Ospino	Portuguesa								X
18. Mayorica	Yaracuy	X	X						X
19. Minas d.Aroa	Yaracuy	X	X					X	
20. San Carlos	Cojedes				X			X	
21. Calabozo	Guarico	X	X					X	
22. Henry Pittier	Guarico		X				X	X	X
23. S. Barbara	Zulia								X
24. Machiques	Zulia	X						X	
25. El Tigre	Anzoategui	X	X		X			X	
26. R. Penalver	Anzoategui	X	X					X	
27. S.Guevara y Lira	Anzoategui	X	X				X	X	X
28. La Pica	Monagas	X	X				X	X	X
29. E. L. Contreras	Bolivar	X						X	
30. G. Mohedano	Bolivar	X						X	
31. Caicara	Bolivar	X						X	
32. J.F. de Leon	Miranda	X	X					X	
33. C. Sanda	Carabobo	X	X					X	
34. Alpargaton	Carabobo								X
35. M. Borras	Carabobo								X
36. Gonzalito	Aragua		X					X	X
37. A.A. Larriva	Barinas		X					X	
38. E.de Pesca	Sucre			X		X		X	
39. Cumanagotos	Sucre								X
40. Tucupita	T.P.D. Amacuro								X

Source: Review of Curriculum for VOC-AG Education in Oklahoma State University, U.S.A. with Alternatives to VO-AG Programs in Venezuela. Pastor Perez. (30, p. 24)

Figure 7. Map of Venezuela Locating the Agricultural High Schools.

4. The departments of the school are: (a) Evaluation, (b) Orientation, (c) Control and registration of students, (d) Agriculture department, and (e) Non-agricultural teachers' department.

The government provides scholarships for those students from rural areas who are willing to study in vocational agriculture schools. If the school is not in the student residential area, the scholarship provides for any additional expenses, such as dormitory fees, cafeteria fees, medical services, as well as expenses accruing from the required student training experience program (31).

The students who elect to study at vocational agriculture schools are largely those who are planning college study in the field of agriculture and related areas, as well as those who are planning to enter the work force immediately after high school graduation.

According to Burroughs (32) writing in the World Education Series, there are a number of sources of problems in vocational agricultural education in Venezuela. Included are problems in: (1) programs, (2) methodology, (3) lack of students, (4) ineffective supervision, (5) low productivity of school farms, and (6) little incentive for the teachers to obtain either social or economic advancement. Quoting from Burroughs (32):

> The educational problems of the rural area in Venezuela are consequences of a complex of causes: geographical remoteness; conservative or at least ambivalent attitudes of parents; the relentless demands that the hours, the days, the weeks and the season make on husbandry; the lack of services, medical, social, supply; the reluctance of trained personnel to return to the villages which so sorely need them; organizationally, a confusion of responsiblity for educational provision between central government, state and municipality here seen at its worst (p. 81).

A growing number of educators seem to feel that agricultural instruction at various levels tends to present excessive complications,

and is not necessarily directed toward technical skills more commonly needed by workers in the different Venezuelan agricultural areas. Of special concern is the lack of functional training at the middle professional level for present agriculturalist. The great need is for instruction geared to a rapidly changing, dynamic agriculture.

According to a basic study of rural educational problems, produced through a joint effort between the Organization of American States and the Ministry of Education of Venezuela and completed in February of 1971, the problems are of a varied nature, and go from the use of inadequate techniques and methods of teaching to formally ignoring the every day problems of "campesino" families. Revealing further discrepancies, a report issued in 1978 reaffirmed the inadequacies of instructional programs (15).

Isbelia de Segnini asserts that many educational methods presently used are limited in the effectiveness and hence should not be recommended. She further says that the kind and extent of preparation made by teaching personnel is often far from the optimum. Correcting this deficiency will be difficult since the remuneration teachers receive is far from stimulating. The whole instructional system is hampered by limited evaluation in which the integral development of the individual is largely ignored and supervisory activities are often highly deficient. Finally, Segnini says that the allocation of resources is too often rather small, and that any additional drain on the meager resources of the student's family, often results in association with malnutrition. This combines to squelch motivation both for student and teacher and often actually encourages students to drop-out of their studies (15).

Suggested Strategies Which May be Used For Integrating Secondary Agricultural Education into the Ongoing Program of Rural Community Development

Desirable Relationships Between Rural Community Development and Vocational Agricultural Education

Effective agricultural education implies a simultaneous transformation of many conditions of rural life. Effective education and development must go hand in hand, whether in rural areas or elsewhere (33).

Any new educational order will not be established until the involved countries have clearly defined the principles on which they intend to simultaneously build their development and improve education (34).

> Recognition of the close relationship between education and development, technology and awareness, is unavoidable. The problem is not just to learn a new technology: it is to accept the process of social change needed by development (35, p. 32).

That effective programs of education for people engaged in agriculture, and in fact all rural dwellers, is greatly needed is well stated by Coverdale (2, p. 4), ". . . the well-being of the countryside has much to do with the efficacy, or otherwise, of rural education programmes."

Governmental Commitments to Improve Vocational Agricultural Education and Enhance Rural Community Development

The Venezuelan Government has posited a commitment to improve

social conditions in the rural areas. This statement is documented in the following:

According to the Artículo 3 de la Ley Orgánica de Educación de la Rupublica de Venezuela (36):

> Vital and dynamic education will foment the development of a citizenry conscientious of the needs of conservation, defense and improvement of ambient life quality, as well as the rational use of natural resources. Such education will contribute to the formation and true development of human resources so necessary for the country's progress. The promotion of such creative effort among Venezuelan people will result in the benefit of their integral, independent and autonomous development (p. 1).

Also the Artículo 7 of the same Law (36) states:

> The educative process will be closely entailed within work, with the object of harmonizing the education with the extensive productive activities of national, regional and local development, and should create a mind set of incentive, pride and sense of responsibility, with the production and equitable distribution as the major result (p. 3).

And more specifically, planners of the Comisión Nacional Para el Desarrollo de la Educación Rural de Venezuela (25) pointed out that secondary agricultural education:

> Has a major objective to assist individuals to develop their capacities, to successfully engage in efficient and economically profitable labours in agriculture and livestock raising. Further, to instruct them in the profitable tillage and conservation methods of land and other renewable natural resources. In general, the aim is to increase the social, cultural and ethical levels of the rural sector (p. 28).

Summation of Factors Retarding Rural Community Development Through Lack of Vocational Agricultural Involvement

Although the quotations shown immediately above can be judged as very worthy and express laudable intent, their accomplishment is far from being realized. No doubt, the extremely slow progress is due to

many interrelated factors.

In a term paper prepared by the researcher (5) in the Fall semester of 1980, the following associated factors were pointed out:

> Schools are located within rural communities but often they do not identify with the community. The schools and communities both tend to develop separate and independent social services, physical plants, cultural centers, etc.
> ·There is quite often a lack of communication between agricultural education planners, and social and economic development planners at the national, regional and local levels.
> ·Currently, rural education is only making meager contributions to the improvement of the quality of life in the rural communities. As a result, rural people continue to leave the village to seek, what they suppose to be a new and better life in town. However, many times they may actually find themselves caught up in the complexity of urban problems which, as a result, leave the campesino in an even worse predicament.
> ·Almost all schools are boarding schools and thus the young people graduate having lived under conditions much superior to those of their home community. The improved living conditions of the boarding schools are such, that graduating students often do not wish to return to the rural community to enter the agriculture workforce. They would much prefer to take an office job and live in a more developed urban community.
> ·The poor living conditions, inadequate pay, and lack of social lives causes teachers and other professional people to avoid living and working within the rural villages.
> ·There are many other factors but these alone should prove adequate to illustrate the serious need for change (p. 19).

Bases for and Thrust of Balanced Rural Community Development

It is the author's firm view that rural community development should be both balanced and integrated. Needless to say, this requires an interdisciplinary approach that encourages taking into account the vast complex of factors and their components, as they may affect each other and thus greatly influence the developmental process and the final attainment of the goal of better quality of life for the citizenry.

This Balanced and/or Integrated Rural Community Development should improve the quality of life for all the people of the rural communities of Venezuela. The improvement should both involve and contribute to the following:

Human Resources	People Participation
Economic Resources	Land, Capital
Social Services	Education, health recreation, culture, sport and leisure activities, family planning.
Resources for Production and Marketing	Credit, land, market road, transport, trade, seed, storage, fertilizer.
Community Organizations	Cooperatives, Agencies
Non-Agricultural and Services Sectors	Industry, business, etc.

In summary, the balanced approach to Rural Community Development is divided into two major thrusts:

1. Improvement of the quality of life, and
2. Improvement of agricultural production and marketing.

In Figure 8 is shown a diagramatic description of the concept presented above.

The ideas basic to this concept were synthesized from a number of sources, including the writings of Tweeten and Brinkman (7), Coverdale (2), Malassis (35), FAO, UNESCO (9).

Selected Specific Strategies for Achievement of Integrated or Balanced Rural Community Development as Related to Education

In order to contribute to the ongoing program of rural community development through agricultural education, there are some selected

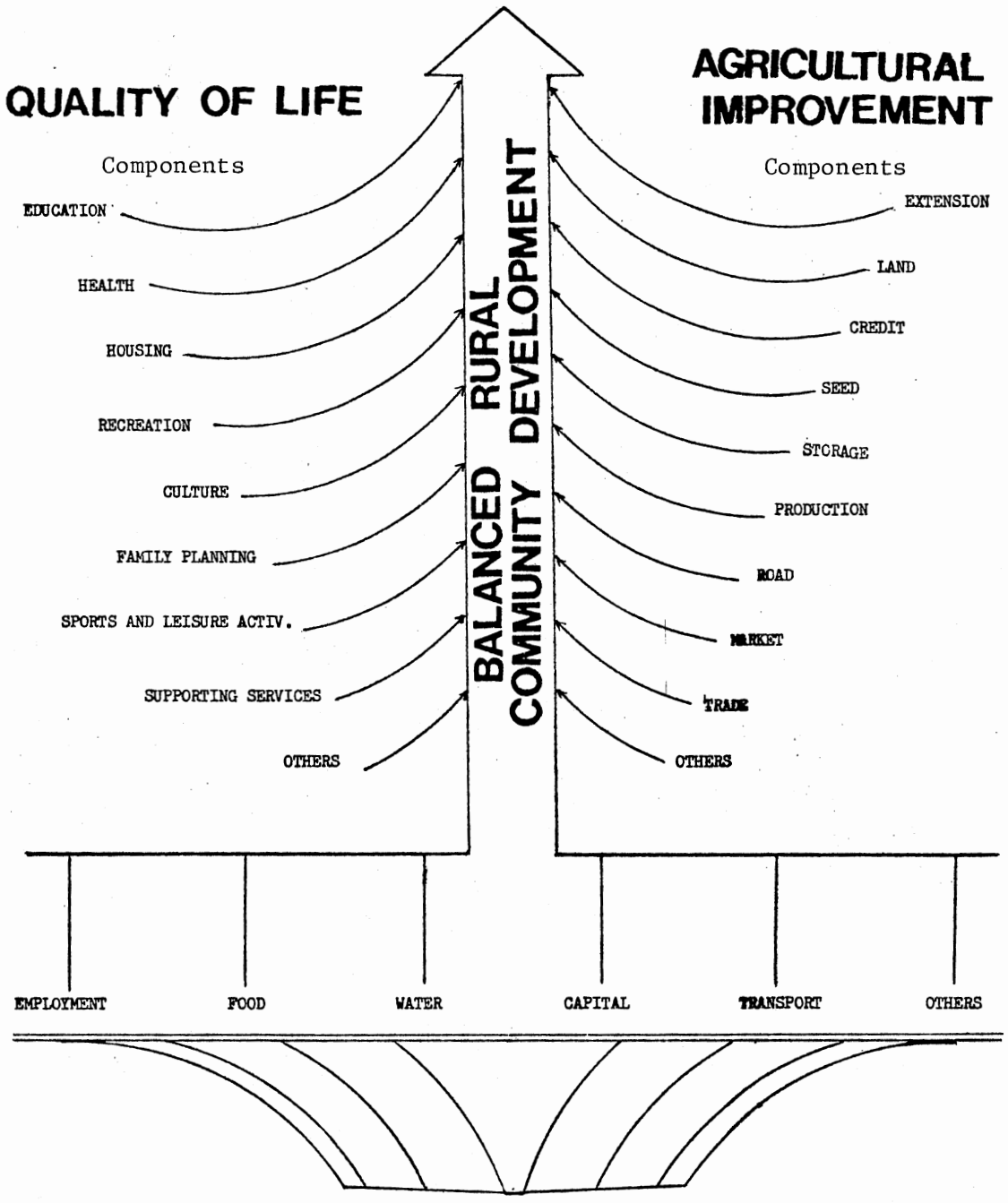


Figure 8. Schematic Presentation of the Concept of Balanced and Integrated Rural Community Development.

specific strategies that might be carried out in Venezuela.

Of primary concern is the professional preparation of rural teachers. In order to best prepare them for their role in education, particularly effectiveness in promoting Rural Community Development, it is most essential that tyro teachers be carefully guided into more complete identification with the postulates of the rural sector. After such achievement, they can better play an effective role in the implementation of the curriculum in the schools in a rural environment.

According to UNESCO, Regional Office for Education in Asia (10), there are certain implications and growth points for preparing teachers in education for Rural Community Development. Included are:

> 1. There is an urgent need to examine the current programmes for preparing teachers. The curricula of teacher training institutions need analysis with respect to the requirements for teachers to be involved in programmes of education for rural development.
> 2. The teacher-training curricula need revision on the basis of identified knowledge and skills required by school teachers in rural areas.
> 3. The pre-service training of teachers should include courses on rural development, information about agencies undertaking programmes of education for rural development, and activities which will assist teachers in developing a clear understanding of the national educational goals in rural development.
> 4. The training methodology of teacher education institutions will need close scrutiny and reorganization as the teaching methods of teachers in rural schools will be affected by the new objectives of education for rural development.
> 5. Teacher educators will need a strong programme of continuing education to equip them to prepare teachers for new challenges in rural development.
> 6. The in-service programmes for teachers will need to be planned in the context of knowledge and skills required for rural development.
> 7. Teacher training institutions may have to provide training to teachers to develop and handle modules to be used by teachers and pupils in rural schools (p. 10).

Johnson (37), in an article "Curriculum Development for Community Education" appearing in Community Education Journal, May-June, 1975, suggests the following:

Each of the following elements should be included in the curricula:

a. Education-Community Education
    1. History
    2. Philosophy
    3. Methodology
    4. Practicum
    5. Agencies
b. Interdisciplinary Training
    1. Social Work Organizations
    2. Political Sciences
    3. Recreation
c. Public Relations and Human Relations Skills
    1. Personal and Interpersonal
    2. Management
    3. Delivery
d. Research, Planning, Programming and Evaluation
e. Economics, Budget and Finance
f. Recruitment and Training (p. 19).

Also of much importance for achievement of the goal of integrated rural development through agricultural education is the possible need for revision of curricula of Secondary Agricultural Education. This may well be needed in order to more readily incorporate such essential elements of Rural Community Development into the educational programme. It would also seem very appropriate that the professional agricultural worker trained in these secondary schools, and who eventually works in some capacity with farm people, would logically be the person who would contribute suggestions and work closely with and among the people on rural community improvement projects.

According to some contributors to a UNESCO Regional Office for Education Report (10), it was pointed out that in Asia:

> Two approaches are being followed in relating school curriculum to education in rural development: (a) the elements of rural development are neatly and thoroughly integrated into the school curriculum in such a way that education in rural development becomes the school curriculum and (b) the usual academic curriculum is retained and activities related to rural development are assigned to extra-curricular affairs. Rural development activities are being intertwined in the curricular, co-curricular and extra-curricular activities (p. 5).

For purposes of this study, the term "revision of curricula" must be clearly understood to be descriptive of much more than a simple rearrangement of courses, or change in requirements for given subjects. A broader, but fundamental concept of needs is expressed by Coverdale (2, p. 6) as follows: "What is needed is not simply to add more education to what already exists, but to change in a fundamental way to whole structure, direction, and content of their educational system."

Clearly, to achieve Integrated Rural Community Development through vocational agriculture in the secondary schools calls for a change in the curriculum to such an extent that all of direction, structure and content undergo scrutiny, intensive study and improvement.

This important concept regarding curriculum development and/or change is further well stated by Eedle (38) in his article "Education in Rural Areas" appearing in Teacher Education in New Countries. He makes the following astute observation:

> Education fulfills its purpose only if integrated into the overall pattern of development. It should be a part of development and should be regarded neither as the precursor to development nor as the later reflection of development in other fields (p. 108).

A third important strategy for consideration is that of making the school serve as an instrument to achieve Integrated Development within the community.

Each vocational agricultural school should serve as an effective community development center where faculty and staff willingly work in cooperation with rural leaders as they seek to overcome problems and help all citizens to experience a more abundant quality of life.

Such service would of necessity involve more than school personnel, but school personnel are key people in the attainment of such goals.

If, through vocational agricultural schools, true community education is realized in local communities, then the following quotation from a position paper developed by the Oklahoma State University Center for Community Education (39) would appear most acceptable:

> Community Education is based on a process of involving citizens in identifying conditions and resources of the community. This process is vital since it not only inculcates a sense of ownership in participants but it also assures that relevance and renewal will be built into the resulting efforts.
> No force such as a single person, agency or institution is capable of delivering Community Education. It requires, instead that a combination of forces combine energies and resources to help bring it about. However, important to such efforts are the Community Schools which serve as a catalytic agent in bringing about Community Education (p. 1).

Price (40), who has had many years of observing and working with vocational agriculture programs in Oklahoma sees vocational agriculture schools as assuming many of the responsibilities of Community Education. In an article published in the February-April, 1981 issue of the Oklahoma Community Education Newsletter, he posits the following idea:

> When pondering the two phenomena, community development and community education, I am tempted to risk the accusation of catachresis, for it suddenly becomes quite plain to me that community education becomes a catalyzer, the necessary ingredient, or enabler, which speeds up the fuller realization of community development. Resources, both human and material, exist in each community. The great need is to provide counsel and promote communication in order to structure and develop these resources so that life does become more abundant for all the people of the community (p. 1).

Decker (41), author of the pamphlet "People Helping People" sets forth three areas as framework for attainment of certain goals or objectives:

> Area I: Expanded use of school facilities.
> *Expand the use of physical and human resources of the school for community purposes.
> *Use the schools to provide cooperative home-school-community relationships.
> *Use the schools as community service centers for meeting supplementary and alternative educational, social, health,

cultural and recreational needs and wants.

Area II: Coordination and Interagency Cooperation
*Promote a cooperative working relationship between community institutions, agencies, groups and industries.
*Facilitate the coordination of individual, group, agency, school, business and industrial resources to deal with community problems.
*Encourage collaboration among community agencies and organizations to improve and jointly use community facilities.

Area III: Involvement and Participation
*Provide increased opportunities for people to participate in community decision-making.
*Increase involvement and participation of individuals in community activities.
*Involve citizens in the planning, implementation, and evaluation of community programs and projects (p. 7).

Finally, but by no means less important, is the fourth strategy to be presented, that of the expanding role of the Vocational Agricultural Teachers in bringing about the improvement of the rural community.

Agricultural teachers, first and foremost should be recognized as members of the rural communities where they work. Since the people making up the population of a community are potential benefactors of all resources in the community, the development and management of these resources is the responsibility of the people. As a result agricultural teachers should understand and utilize rural community development practices as a regular part of their duties, by participating as facilitator, leader, organizer, and follower in the development of their community. An essential element for attaining this practice is participating in the problem-solving process.

Perhaps in no other way is the development of attitude so readily gained by the individual as through his learning experiences in school. Here, in the daily give-and-take with fellow students, he formulates those conceptual attitudes that will determine his behavior both in his

local community and even as he may become a part of a global effort. Good guidance, on the part of the teacher coordinated satisfactorily with the day by day routine of the school will go far toward preparing future citizens to recognize the school as a genuine instrument of development within the community.

Segnini (15), in his book Dinamica de la Agricultura y su Expresión en Venezuela, suggested the following:

> The rural teachers have an additional function, which may be turned delicate, often very difficult, which demands that they not only know and be able to readily communicate content of courses they teach, but that they function as an enabler that the learner might perceive and perhaps be the 'knot' binding all strands of development efforts, overcoming frequent isolation and often providing leadership which contributes both directly and indirectly to the socio-economic development of the rural community (p. 304).

In order that the teacher be able to perform in the manner suggested above, it would seem helpful if a listing of knowledge and skills which he might be need be reviewed. Bennet (42), in a manual printed in 1969, attempts such a listing as follows:

> (1) Know the forms and patterns of social behavior.
> (2) Know the kinds of groups that exist within a community from the family to the corporation structure to the municipal government.
> (3) Be able to recognize patterns of organization within a social group.
> (4) Recognize the forces within individuals and groups that shape individual behavior.
> (5) Understand the interrelationships among all the groups in a community and of groups within the community to groups outside the relationship of business and industry in a community to town government and of both to state agencies, Federal government and national organization.
> (6) Understand the dynamics of change within a variety of social systems (p. 55).

Programs of young and adult farmer education as carried on by teachers in vocational agriculture in high schools of the United States reflect many aspects of Community Education, in-as-much as they involve

adults not enrolled in high school and are quite inclusive of activities directed toward maintenance and development of the community. While the major task assumed by teachers is that of the instruction of high school students, many teachers recognize and assume responsibility for promoting adult learning activities which may culminate in community programs which enhance more satisfactory rural living. However, the effort and performance of vocational agriculture teachers varies to a great extent, with some teachers exerting considerable time and effort to the task, while others are concerned almost exclusively with the regularly enrolled high school students, and only give attention to the minimum requirements for adult education.

Price (43), in an effort to find possible reasons for this wide variation in performance, researched this phenomenon in the states of Pennsylvania and Oklahoma. He concludes:

> In summary it can be said that this investigation (1) emphasizes the fact that in both the states of Pennsylvania and Oklahoma very adequate and effective programs of young adult farmer education are functioning; (2) provides evidence that the geographic location of the school is not associated with the occurrence of such educational programs; (3) refutes the assumption that age, years of experience, or years of tenure of the teachers are associated with the occurrence of young farmer programs; (4) indicates that teachers teaching out-of-school courses for young farmers also provide equal or superior programs of vocational agriculture and FFA chapter activities for all-day students; and (5) presents a challenge to teacher educators and supervisors in emphasizing recognition of the important role which they play in the recruitment, training, and supervision of teachers of vocational agriculture (p. 250).

Price (43) further claims that fundings of the study justify the following statement of implication:

> The implication is quite strong that, as far as the local teacher of vocational agriculture is concerned, the occurrence of young adult farmer programs is due to some motivating force that is much stronger and more deeply seated than

> the opinions held by the individual. Perhaps, since, as is revealed by this study, teachers of out-of-school farmer groups were found also to have exhibited more activity in extra-curricular and campus leadership events, the possession of a more extroverted personality, or initiative to engage in situations involving social interrelationships, may be indicative of a greater tendency to implement instructional programs with out-of-school young farmers (p. 248).

In conclusion, content of this review of literature chapter has established (1) the need for a close working relationship between Rural Community Development and Vocational Agricultural Education, (2) past and present commitments of the government of Venezuela to enhance Rural Community Development and Vocational Agricultural Education, (3) identified factors retarding Rural Community Development through Vocational Agricultural Education, (4) presented a theoretical framework for bases and thrust of Rural Community Development, and (5) presented selected specific strategies for achievement of Integrated and/or Balanced Rural Community Development as related to education.

Professional educators in Venezuela need to carry out an effective program of secondary agricultural education in order to contribute substantially to the goal of further establishment and maintenance of a strong, ongoing program characterized by the balanced-integrative approach to rural community development.

CHAPTER III

METHOD AND PROCEDURE

The major purpose of this chapter was to describe population parameters, sampling procedures, the instrument to be used for data collection, and the methods of analysis to be used.

Population

The location of the forty high schools of agricultural education in Venezuela is shown in Table XI. These schools are spread throughout the country and are located according to the major production of the area or its resources. Secondary agricultural education administrators and teachers, and farmers living in villages within a radius of five kilometers from these schools constituted the population of this study.

Sampling Procedure

As shown in Table XI, for the administrator's category, respondents were selected by random sample among 40 directors, 30 subdirectors and 40 coordinators, totaling groups of 24, 24, and 30, respectively. For respondents in the teacher category, random sample selection among the 250 full-time teachers and 120 part-time teachers resulted in a sample with numbers of 69 and 36, respectively. Finally, among the target population of 500 farmers, a sample of 150 was taken. The farmer sample was taken according to a grid sampling technique described in detail in

directions for administrating the questionnaire as shown on page 65.

TABLE XI

TARGET POPULATION PARAMETERS AND SAMPLING

Population Category	Target Population	Sampling Number	%
Administrators:			
Directors	40	24	60*
Subdirectors	30	24	80*
Coordinators	40	30	75*
Teachers:			
Full-time Teachers	230	69	30*
Part-time Teachers	120	36	30*
Farmers	500	150	30*

* Percentage of target population in each respondent sample category.

Instrumentation

Since this research effort was faced with the impossibility of using other means, the researcher used a mailed questionnaire to collect data.

The questionnaires were constructed in order to obtain: (1) certain

basis demographic information and (2) perceptions of administrators, teachers and farmers as to selected aspects of the relationship between Vo-Ag and rural community development in Venezuela. The nature of the questionnaires was such as to direct respondents to evaluate possible contributions which selected aspects of the teaching program in agriculture might make toward successful achievements in rural development.

Data Collection

In September, 1980, the copies of the instrument were sent by mail to secondary school Directors of each of the vocational agriculture schools in Venezuela. Enclosed with the questionnaire schedule was a personal letter from the researcher directed to the principal of each high school selected for distribution to teachers. A questionnaire sample showing how to fill out the questionnaire was also included. Principals were requested to designate one teacher to supervise distribution of questionnaire to farmers according to the following grid sampling technique.

Instructions for Taking the Sample of Five Farmers

A. When the school is not located in the urban area, take the school as a center of a circle having a radius five kilometers (Km).

1. For the location of the first farmer, go directly North from the school as closely as possible and interview the farmer living at one Km.

2. For the location of the second farmer, go directly South from the school and interview the farmer living at two Km.

3. For the location of the third farmer, go directly West from the school and interview the farmer living at three Km.

4. For the location of the fourth farmer, go directly East from the school and interview the farmer living at four Km.

5. For the location of the fifth farmer, go directly South-East and interview the farmer living five Km from the school.

B. When the school is located in an urban area, simply use the location of the school-farm as the location of the center.

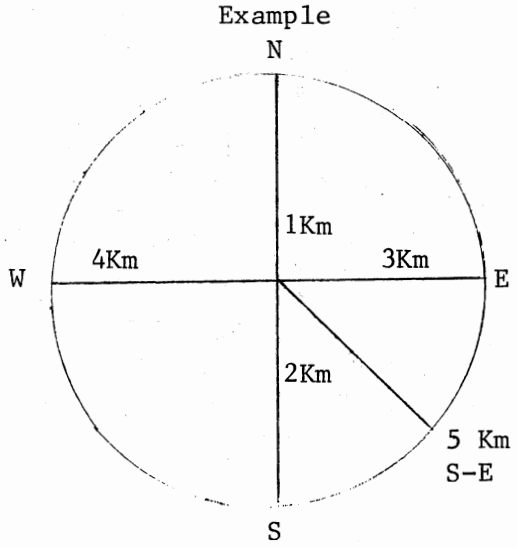


Figure 9. Grid Configuration for Farmer Sampling.

Analysis of Data

Both statistical and analytical treatment were used. Open-ended questions were given due weight along with comparisons of scores of the

respective groups to the items presented through a Likert scale response.

The questions and statements on the questionnaires were so designed that selected respondents could easily indicate their views and judgements by checking the appropriate items on the survey form or writing short, concise answers (see Appendix A).

In order to analyze the data, the researcher used a variety of response scales. As a result, it was necessary to develop a system for determining mean responses.

The system required the assignment of numerical values and establishment of response category limits. Table XII shows these limits as they were established and used as bases for discrimination of category differences.

After thorough analysis and summary of findings conclusions were drawn and recommendations were made.

TABLE XII

SCALE OF VALUES APPLIED TO RESPONSE CATEGORIES

Response	Numerical Value Assigned to Statements	Limits for Response Category
Very Satisfied	4	3.5 - 4.0
Satisfied	3	2.5 - 3.49
Dissatisfied	2	1.5 - 2.49
Very Dissatisfied	1	1.49 and below
Always	5	4.5 - 5.0
Often	4	3.5 - 4.49
Sometimes	3	2.5 - 3.49
Seldom	2	1.5 - 2.49
Never	1	1.49 and below
Not a Problem	4	3.5 - 4.0
A Small Problem	3	2.5 - 3.49
A Moderate Problem	2	1.5 - 2.49
A Severe Problem	1	1.49 and below
Very Well	4	3.5 - 4.0
Some What	3	2.5 - 3.49
Little	2	1.5 - 2.49
None	1	1.49 and below

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

As previously stated, the major purpose of the study was to determine what might be the appropriate role of secondary agricultural teachers in providing assistance in bringing about development in the rural sectors which might result in a more abundant life for rural inhabitants; and as a collateral purpose to assess perceptions of secondary agricultural school administrators, teachers, and of farmers as to (1) present status and (2) future needs for rural development in Venezuela. In order to satisfy these identified purposes, certain specific objectives were formulated, as stated in the first chapter of the study, page 4.

In order to accomplish the specific objectives, responses were collected and collated. Consequently, the researcher presents in this chapter various analyses, using tables to facilitate presentation.

Data Regarding Collection of Responses

Perhaps it would be well to recognize that the researcher faced certain difficulties in obtaining data from Venezuela. One difficulty encountered was that at the time questionnaires were mailed, Venezuelan Postal Office employees were on strike. As a result, some school directors did not receive the mailing and those who did were not able to return the completed questionnaire schedules according to the time

schedule originally required by the researcher.

It could well be that the difficulty with the original mailing actually resulted in an even better return quoting Levine and Gordon (44, p. 574): "Despite the most diligent effort in respondent preparation and questionnaire design, a considerable number of respondents will fail to respond to initial mailing." However, eventual collection of data was facilitated by a brief return of the researcher to Venezuela in December. Contact with a number of principals was made by telephone, telegram, radio, as well as several personal interviews.

With regard to the response returned, as indicated by data shown in Table XIII, the study was well supported in the more than 79% return from administrators, 75% from teachers and 86% from farmers.

TABLE XIII

RESPONSES RECEIVED FROM ADMINISTRATORS, TEACHERS AND FARMERS

Population Category	Target Population	Sampling No.	Sampling %	Returned No.	Returned %
Administrators					
Directors	40	24	60*	19	79.16**
Subdirectors	30	24	80*	20	83.33**
Coordinators	40	30	75*	25	83.33**
Teachers					
Full-time Teachers	230	69	30*	56	81.16**
Part-time Teachers	120	36	30*	27	75.00**
Farmers	500	150	30*	130	86.67**

* Percentage of target population in each respondent sample category.
** Percentage of respondent sample return for each sub-category of respondents.

Data Descriptive of Rural and Community Development Situation

Extent to Which Selected Problem Areas are Associated with Agricultural and Rural Development

Data shown in Tables XIV and XV present judgements of administrators, teachers and farmers with regard to the extend to which selected problem areas are associated with agricultural and rural development. These problem areas were divided into two sections which are: a) Farm Production and Marketing, and b) Family Life. The first one included eight items, which two of them with seven and four subdivisions, respectively.

Administrator and Teacher Responses

Findings presented in Table XIV show certain responses by administrators and teachers. These responses reveal that all items are between a mean score from 1.50 to 3.49 which is evident that as a group administrators and teachers reported the problem areas as "a moderate problem" and "a small problem".

Data as shown in Table XIV regarding administrators and teachers responses show ranking in descending order, the following items as those with which respondents considered as "a small problem": (1) resources available for production and marketing: (a) credits, (2) technical assistance by cooperative association, (3) resources available for production and marketing: (b) land, (4) ability of extension workers to explain new or improved farming methods, (5) prices received for farm

TABLE XIV

JUDGEMENT OF EDUCATORS WITH REGARD TO THE EXTENT TO WHICH SELECTED PROBLEM AREAS ARE ASSOCIATED WITH AGRICULTURAL AND RURAL DEVELOPMENT

AREAS	Not a Problem No.	%	A Small Problem No.	%	A Moderate Problem No.	%	A Severe Problem No.	%	Cumulative Rating	Mean	Ranking Ascending Order
A. Farm Production and Marketing Section											
1. Opportunity to learn about improved farming methods.	14	10.77	22	16.92	65	50.00	29	22.31	281	2.16	16
2. Ability of extension workers to explain new or improved farming methods.	11	8.46	25	19.23	40	30.77	54	41.54	297	2.28	21
3. Usefulness of information provided by extension workers to small farmers.	18	13.85	32	24.62	29	22.31	51	39.23	277	2.13	14
4. Farming productivity.	25	19.23	14	10.77	61	46.92	30	23.08	294	2.26	19 TIE
5. Prices received for farm products.	4	3.08	22	16.92	72	55.38	32	24.62	258	1.98	9
6. Cost of materials for farming operation.	29	22.31	7	5.38	58	44.62	36	27.69	289	2.22	18
7. Resources available for production and marketing:											
A. Credits	25	19.23	7	5.38	51	31.23	47	36.15	270	2.08	12 TIE
B. Land	29	22.31	4	3.08	51	41.54	43	33.07	279	2.15	15
C. Markets	25	19.23	14	10.77	65	50.00	26	20.00	298	2.29	22
D. Roads	25	19.23	18	13.85	43	33.07	44	33.85	284	2.18	17
E. Storage	36	27.69	14	10.77	43	33.08	37	28.46	309	2.38	24 TIE
F. Seed	22	16.92	11	8.46	43	33.08	54	41.54	261	2.01	10
G. Fertilizer	11	8.46	22	16.92	43	33.08	54	41.54	250	1.92	8
8. Farmer cooperative association:											
A. Organization	11	8.46	18	13.85	43	33.08	58	44.62	242	1.86	7
B. Management	18	13.85	25	19.23	36	27.69	51	39.23	270	2.08	12 TIE
C. Financing	0	0.00	11	8.46	40	30.77	79	60.77	192	1.48	*
D. Technical Assistance	22	16.92	7	5.38	29	22.31	72	55.38	239	1.84	5
B. Family Life Section.											
9. Opportunity for children to receive education.	18	13.85	29	22.31	58	44.62	25	19.23	300	2.31	23
10. Adequate health service for the farm family.	14	10.77	11	8.46	47	36.15	58	44.62	241	1.85	6
11. Adequate family planning information and service.	11	8.46	7	5.38	47	36.15	65	50.00	224	1.72	1
12. Sanitation:											
A. Black-Water	14	10.77	14	10.77	32	24.62	70	53.85	232	1.78	4
B. Latrine	11	8.46	36	27.69	29	22.31	54	41.54	264	2.03	11
13. Clear, safe, adequate drinking water	32	24.62	22	16.92	40	30.77	36	27.69	310	2.38	24 TIE
14. Wholesome entertainment for the family:											
A. Sports	11	8.46	11	8.46	40	30.77	68	52.31	225	1.73	2
B. Television	22	16.92	29	22.31	40	30.77	39	30.00	294	2.26	19 TIE
C. Radio	29	22.31	32	24.62	36	27.69	33	25.38	317	2.44	26
D. Meeting place	14	10.77	22	16.92	29	22.31	65	50.00	227	1.75	3

TABLE XV

JUDGEMENTS OF FARMERS WITH REGARD TO THE EXTENT TO WHICH SELECTED PROBLEM AREAS ARE ASSOCIATED WITH AGRICULTURAL AND RURAL DEVELOPMENT

AREAS	Number Responding No.	%	Not a Problem No.	%	A Small Problem No.	%	A Moderate Problem No.	%	A Severe Problem No.	%	Cumulative Rating	Mean	Ranking
A. Farm Production and Marketing Section													
1. Opportunity to learn about improved farming methods.	137	93.20	29	21.16	53	38.69	47	34.31	8	5.84	377	2.75	6*
2. Ability of extension workers to explain new or improved farming methods.	139	94.56	37	26.62	32	23.02	60	43.17	10	7.19	389	2.80	4*
3. Usefulness of information provided by extension workers to small farmers.	134	91.16	29	21.64	39	29.10	60	44.78	6	4.48	359	2.68	8*
4. Farming productivity.	126	85.71	26	20.64	39	30.95	53	42.06	8	6.35	335	2.66	9*TIE
5. Prices received for farm products.	142	96.60	32	22.54	53	37.32	50	35.21	7	4.93	394	2.77	5*
6. Cost of materials for farming operation.	129	87.76	26	20.15	13	10.08	34	26.36	56	43.41	267	2.07	2**
7. Resources available for production and marketing:													
A. Credits	134	91.16	21	15.67	37	27.61	55	41.05	21	15.67	410	3.06	1*
B. Land	137	93.20	18	13.14	47	34.31	58	42.33	14	10.22	415	3.03	3*
C. Markets	131	89.12	26	19.85	39	29.77	53	40.46	13	9.92	340	2.60	13*TIE
D. Roads	132	89.80	8	6.06	63	47.73	50	37.88	11	8.33	332	2.52	18*
E. Storage	129	87.76	34	26.36	39	30.23	34	26.36	22	17.05	343	2.66	9*TIE
F. Seed	131	89.12	18	13.74	37	28.34	60	45.80	16	12.21	319	2.44	8**
G. Fertilizer	133	90.48	18	13.53	32	24.06	66	49.63	17	12.78	317	2.38	7**
8. Farmer cooperative association:													
A. Organization	145	98.64	42	28.96	32	22.07	34	23.45	37	25.52	369	2.54	15*TIE
B. Management	141	95.92	39	27.66	31	21.99	26	18.44	45	31.91	346	2.45	9**
C. Financing	133	90.48	44	33.08	26	19.55	29	21.80	34	25.57	346	2.60	13*TIE
D. Technical Assistance	137	93.20	45	32.84	27	19.71	32	23.36	33	24.09	417	3.04	2*
B. Family Life Section.													
9. Opportunity for children to receive education.	139	94.56	5	3.60	43	30.93	58	41.73	33	23.74	298	2.14	3**
10. Adequate health service for the farm family.	136	92.52	16	11.76	63	46.32	45	33.09	12	8.83	355	2.61	12*
11. Adequate family planning information and service.	140	95.24	26	18.57	55	39.28	41	29.29	18	12.86	369	2.64	11*
12. Sanitation:													
A. Black-Water	141	95.92	37	26.24	39	27.66	31	21.99	34	24.11	361	2.56	15*
B. Latrine	142	96.60	18	12.68	37	26.06	51	35.91	36	25.35	321	2.26	5**TIE
13. Clear, safe, adequate drinking water	143	97.28	21	14.68	34	23.78	49	34.27	39	27.27	323	2.26	5**TIE
14. Wholesome entertainment for the family:													
A. Sports	141	95.92	44	31.20	39	27.66	31	21.99	27	19.15	382	2.71	7*
B. Television	139	94.56	11	7.91	38	27.34	53	38.13	37	26.62	301	2.17	4**
C. Radio	142	96.60	8	5.63	26	18.31	66	46.48	42	29.58	284	2.00	1**
D. Meeting place	141	95.92	39	27.66	37	26.24	26	18.44	39	27.66	358	2.54	16 TIE

* For rank descending order

** For rank ascending order

products, (6) opportunity to learn about improved farming methods, (7) wholesome entertainment for the family: (a) sports, (8) usefulness of information provided by extension workers to small farmers, (9 TIE) Farming productivity and resources available for production and marketing: (e) storage, (11) adequate family planning information and service, (12) adequate health service for the farm family, (13 TIE) financing of farmer cooperative association and resources available for production and marketing: (c) markets, (15) sanitation: (a) blackwater, (16 TIE) organization of farmer cooperative association and wholesome entertainment for the family: (d) meeting place, (18) resources available for production and marketing: (d) roads.

In like manner, those items with which administrator and teacher respondents considered somewhat as "a moderate problem" and as ranked in ascending order, were: (1) wholesome entertainment for the family: (c) radio, (2) cost of material for farming operation, (3) opportunity for children to receive education, (4) wholesome entertainment for the family: (b) television, (5 TIE) sanitation: (b) latrine, and clear, safe, adequate drinking water, (7) resources available for production and marketing: (f) seed, (9) farmer cooperative association: (b) management.

Farmer Responses

Data as shown in Table XV with regard to farmer responses noteworthy reveal that all the problem areas earned a mean score from 1.50 to 2.49 which evidence that farmers considered all items as "a moderate problem" with the exception of one item, the number (8) farmer cooperative association part (c) financing which were considered as "a severe

problem" with a mean score of 1.48.

Because of the above situation, the ranking was made only in ascending order of those items which farmer respondents considered as "a moderate problem". These are: (1) adequate family planning, (2) wholesome entertainment for the family: (a) sports, (3) wholesome entertainment: (d) meeting place, (4) sanitation: (a) black-water, (5) farmer cooperative association: (d) technical assistance, (6) adequate health service, (7) farmer cooperative association: (a) organization, (8) resources available for production and marketing: (g) fertilizer, (9) prices received for farm products, (10) resources available for production and marketing: (f) seed, (11) sanitation: (b) latrine, (12 TIE) resources available for production and marketing: (a) credits, and farmer cooperative association: (b) management, (14) usefulness of information provided by extension workers to small farmers, (15) resources available for production and marketing: (b) land, (16) opportunity to learn about improved farming methods, (17) resources available for production and marketing: (d) roads, (18) cost of materials for farming operation, (19 TIE) farming productivity and wholesome entertainment for the family: (b) television, (21) ability of extension workers to explain new or improved farming methods, (22) resources available for production and marketing: (c) markets, (23) opportunity for children to receive education, (24 TIE) clear, safe, adequate drinking water and resources available for production and marketing: (e) storage, (26) wholesome entertainment for the family: (c) radio.

It should be noted that when responses expressed by administrators and teachers are compared with those of farmers it is found that exist a notable difference regarding responses. Administrators and teachers

expressed as "a moderate problem" only the following problem areas: item 14, wholesome entertainment for the family: (b) television and (c) radio; item 6, cost of farming operation; item 9, opportunity for children to receive education; item 12, sanitation: (b) latrine; item 13, clear, safe, adequate drinking water; item 7, resources available for production and marketing: (f) seed and (g) fertilizer; and item 8, farmer cooperative association: (b) management. While farmers expressed that all the problem areas were, to an extent, "a moderate problem" with the exception of item 8, farmers cooperative association, part (c) financing that, by a slight difference was considered as "a severe problem".

Areas Most Needing Improvement for Effective Rural Community Development

Data collated in Table XVI reveal voluntary responses of administrators and teachers both separately and combined, made to open-ended questions as to their judges of selected improvement needed if rural and community development is to function at a high level.

It is further important to note that administrators and teachers reported almost the same opinion regarding the areas to be involved. Only the difference which was in the ranking order. Findings further reveal that administrators expressed the following areas in which they felt improvement to be needed. These presented in descending order are: (1) technical assistance, (2) medical assistance, (3) agricultural production, (4) education, (5 TIE) public services and agricultural roads, (7) land and credits, (8) entertainment, (9) family (living), and (10) marketing. In an only slightly different manner, teachers responded

TABLE XVI

VOLUNTARY RESPONSES* OF EDUCATORS AS TO AREAS IN WHICH IMPROVEMENT IS NEEDED IF RURAL AND COMMUNITY DEVELOPMENT IS TO FUNCTION AT A HIGH LEVEL

Areas	Administrator Responses No.	Rank	Teacher Responses No.	Rank	Both Responses No.	Rank
Medical Assistance	22	2	52	1	74	1
Technical Assistance	25	1	33	3	58	2
Public Services	17	5_{TIE}	38	2	55	3
Land and Credits	15	7	27	4	42	4
Education	18	4	19	5	37	5
Agricultural Production	19	3	16	6	35	6
Agricultural Roads	17	5_{TIE}	16	7	33	7
Marketing	2	10	12	8	14	8
Entertaiment	5	8	8	9	13	9
Family Living	4	9	7	10	11	10
Total	144	*	228	*	372	*

* Responses made to open ended questions.

with the following ranking: (1) medical assistance, (2) public services, (3) technical assistance, (4) land and credits, (5) education, (6) agricultural production, (7) agricultural roads, (8) marketing, (9) entertainment, and (10) family.

The ranking order for the combined responses of administrators and teachers is very similar to that expressed by teachers.

Data Descriptive of the Secondary Vocational Agricultural Program

Tenure of Agricultural Educators by Nature of Position Held

Data presented in Table XVII show the tenure of agricultural administrators and teachers by nature of position held. In this study directors, subdirectors and coordinators are all considered administrators. These data show that 41.20 and 45.00 percent of responding directors and subdirectors, respectively, reported having 7-10 years tenure in the Ministry of Education, while 72.00 percent of the coordinators reported a somewhat shorter tenure of from 4 to 6 years. It would further seem important to note that no administrators reported having less than four years of experience. A high percentage of coordinators (72.00 percent) reported tenure within the 4 to 6 years range as contrasted with directors (31.58 percent), and subdirectors (20.00 percent) for this same range. These differences no doubt reflect the fact that coordinators are named by the director while directors and subdirectors are appointed by the government, this largely with due regard to tenure and performance. Responses collated in Table XVII reveal that the major percentage

of teachers reported that they had a much lower tenure with more than 40.00 percent in the 1 to 3 years category.

TABLE XVII

TENURE OF AGRICULTURAL EDUCATORS BY NATURE OF POSITION HELD

Position Held	No.	1-3 Years		4-6 Years		7-10 Years		11 or more Years	
		No.	%	No.	%	No.	%	No.	%
Director	19	0	0	6	31.58	8	42.10	5	26.32
Subdirector	20	0	0	4	20.00	9	45.00	7	35.00
General Coordinator	25	0	0	18	72.00	3	12.00	4	16.00
Full-time Teacher	56	24	42.86	21	37.50	7	12.50	4	7.14
Part-time Teacher	27	11	40.74	7	25.93	8	29.63	1	3.70
Total	147	35	23.81	56	38.10	35	23.81	21	14.28

Although data would appear to indicate a tendency for most teachers to leave the teaching profession prior to beginning the tenth year, this is likely not the case because the majority of the schools included in this study were only established during the previous twelve years period.

Administrator and Teacher Satisfaction with Selected Aspects of Their Job

Findings presented in Table XVIII show certain responses by administrators regarding satisfaction with their job. In a like manner, data presented in Table XIX show teacher responses to this same matter, while data shown in Table XX present certain aspects of data depicting satisfaction by both administrators and teachers.

Responses as to satisfaction or dissatisfaction were made in terms of a Likert-type scale and mean scores were collated according to the rating scale shown as Table XII on page 65 in Chapter III. Since no items earned a mean score of 3.50 or above, it is evident that as a group neither administrators or teachers can be recognized as "Very Satisfied with any item.

Data as shown in Table XVIII with regard to administrator responses show, ranking in descending order, the following items as those with which respondents were "Satisfied": (1) item 5 (relationship with fellow workers), (2) item 1 (job or position), (3) item 3 (Living quarters), (4) item 10 (opportunities to use some ideas and/or methods), (5) item 9 (training received prior to employment), (6) item 4 (present working conditions), (7) item 8 (evaluation made of performance), and (8) item 6 (geographical location of work).

In a like manner, those items with which administrator respondents were somewhat dissatisfied, and as ranked in ascending order, were: (1) item 11 (improvement being made in facilities and teaching aids), (2) item 12 (in general, with the work of the National Vo-Ag Department), (3) item 7 (in-service training programs), and (4) item 2 (pay).

TABLE XVIII

ADMINISTRATOR RESPONSES REGARDING SATISFACTION WITH SELECTED ASPECTS OF THEIR JOB (TOTAL 64)

Item of Concern	Number Responding		Very Satisfied		Satisfied		Dissatisfied		Very Dissatisfied		Percentage of Satisfaction	Cumulative Rating	Mean of All Responses	Rank
	No.	%	No.	%	No.	%	No.	%	No.	%				
1	64	100	11	17.19	46	71.87	4	6.25	3	4.69	89.06	193	3.02	2*
2	64	100	0	0	19	29.68	38	59.38	7	10.94	29.68	140	2.19	4**
3	64	100	13	20.31	32	50.00	19	29.69	0	0	70.31	186	2.91	3*
4	64	100	4	4.69	46	71.87	8	12.50	7	10.94	76.56	173	2.70	6*
5	62	96.88	7	11.29	52	83.87	3	4.84	0	0	95.16	190	3.06	1*
6	64	100	6	9.38	38	59.38	10	15.62	10	15.62	68.76	168	2.63	8*
7	64	100	5	7.81	20	31.25	19	29.69	20	31.25	39.06	138	2.16	3**
8	58	90.63	4	6.90	39	67.24	6	10.34	9	15.52	74.14	154	2.66	7*
9	64	100	11	17.19	28	43.75	25	39.06	0	0	60.94	178	2.78	5*
10	64	100	6	9.38	45	70.31	13	20.31	0	0	79.69	185	2.89	4*
11	59	92.19	2	3.39	4	6.78	35	59.32	18	30.51	10.17	108	1.83	1**
12	59	92.19	0	0	18	30.51	21	35.59	20	33.90	30.51	116	1.97	2**

* For rank descending order

** For rank ascending order

TABLE XIX

TEACHER RESPONSES REGARDING SATISFACTION WITH SELECTED ASPECTS OF THEIR JOB (TOTAL 83)

Item of Concern	Number Responding No.	%	Very Satisfied No.	%	Satisfied No.	%	Dis-satisfied No.	%	Very Dis-satisfied No.	%	Percentage of Satis-faction	Cumula-tive Rating	Mean of All Re-sponses	Rank
1	71	85.54	11	15.49	38	53.52	20	28.17	2	2.82	69.01	200	2.82	5* TIE
2	76	91.57	0	0	20	26.32	40	52.63	16	21.05	26.32	156	2.05	1**
3	77	92.77	2	2.60	30	38.96	32	41.56	13	16.88	41.56	175	2.27	3** TIE
4	74	89.16	1	1.35	16	21.62	50	67.67	7	9.46	22.97	159	2.15	2**
5	82	98.80	23	28.05	47	57.32	8	9.75	4	4.88	85.37	253	3.09	1*
6	80	96.39	22	27.50	41	51.25	14	17.5	3	3.75	78.75	242	3.03	3*
7	79	95.18	13	16.46	31	39.24	29	36.71	6	7.59	55.70	209	2.65	7*
8	77	92.77	21	27.27	40	51.95	12	15.58	4	5.20	79.22	232	3.01	4*
9	80	96.39	23	28.75	44	55.00	9	11.25	4	5.00	83.75	246	3.08	2*
10	79	95.18	17	21.52	41	51.90	11	13.92	10	12.66	73.42	223	2.82	5* TIE
11	78	93.98	1	1.28	31	39.75	34	43.59	12	15.38	40.69	177	2.27	3** TIE
12	78	93.98	6	7.69	21	26.92	43	55.13	8	10.26	34.61	181	2.32	5**

* For rank descending order

** For rank ascending order

TABLE XX

COMBINED RESPONSES OF ADMINISTRATORS AND TEACHERS REGARDING SATISFACTION WITH SELECTED ASPECTS OF THEIR JOBS (TOTAL 147)

Item of Concern	Number Responding No.	%	Very Satisfied No.	%	Satisfied No.	%	Dis-satisfied No.	%	Very Dis-satisfied No.	%	Percentage of Satis-faction	Cumula-tive Rating	Mean of All Re-sponses	Rank
1. With your Job	135	91.84	22	16.30	84	62.22	24	17.78	5	3.70	78.52	393	2.91	3*
2. With your Pay	140	95.24	0	0	39	27.85	78	55.71	23	16.43	27.85	296	2.11	2**
3. With your living (housing, etc)	141	95.92	15	10.64	62	43.97	51	36.17	13	9.22	54.61	361	2.56	7*
4. With the Present Working Conditions	138	93.88	4	2.90	62	44.93	58	42.03	10	10.14	47.83	332	2.41	4**
5. With the Relationship to the Fellow Workers	144	97.96	30	20.83	99	68.75	11	7.64	4	2.78	89.58	443	3.08	1*
6. With the Geographical Location Where you Work	144	97.96	28	19.44	79	54.86	24	16.67	13	9.03	74.30	410	2.85	5*TIE
7. With the Inservice Training Program	143	97.28	18	12.59	51	35.66	48	33.57	26	18.18	48.25	347	2.43	5**
8. With the Evaluation Made of Your Performance	135	91.84	25	18.52	79	58.52	18	13.33	13	9.63	71.04	386	2.86	4*
9. With the Training Received Prior to Your Employment	144	97.96	34	23.61	72	50.00	34	23.61	4	2.78	73.61	424	2.94	2*
10. With the Opportunities to Use some of Your own Ideas or/and Methods	143	97.28	23	16.09	86	60.14	24	16.78	10	6.99	76.23	408	2.85	5*TIE
11. With Improvements being Made in Facilities and Teaching Aids	137	93.20	3	2.19	35	25.55	69	50.36	30	21.90	27.74	285	2.08	1**
12. In general, with the Work of the N.VO-AG D.	137	93.20	6	4.38	39	28.47	64	46.71	28	20.44	32.85	297	2.17	3**

* For rank descending order

** For rank ascending order

Data as shown in Table XIX with regard to teacher responses show, ranking in descending order, the following items as those with which respondents were "satisfied": (1) item 5 (relationship to fellow workers), (2) item 9 (training received prior to employment), (3) item 6 (geographical location of work), (4) item 8 (evaluation made of performance), (5 TIE) items 1 (job or position) and 10 (opportunities to use ideas and/or methods) and (7) item 7 (in-service training program). In addition, those items which teacher respondents were somewhat dissatisfied with, and ranked in ascending order, were: (1) item 2 (pay), (2) item 4 (present working conditions), (3 TIE) items 3 (living quarters) and 11 (improvements being made in facilities and teaching aids), and (5) item 12 (in general, with the work of the National Vo-Ag Department).

It should be noted that when responses regarding degree of satisfaction as expressed by administrators are compared with those of teachers, only three items were determined as notably yielding different responses. Item 3 (living quarters) was rated by administrators as satisfactory with 13 of the total 64 administrators considering this as "Very Satisfactory". On the other hand, teachers, as a group, expressed dissatisfaction with this item with 13 of 77 respondents expressing themselves as "Very Dissatisfied". One factor which may possibly explain somewhat this difference between responses of administrators and teachers, as related to item 3 (living quarters), is that the majority of the schools provide quarters for families of directors and often for subdirectors, which is not true for teachers.

Perhaps closely related to the above are responses to item 4 (present working conditions), which administrators rated as satisfactory,

with 49 (76.56 percent) of the total 64 respondents considering themselves as "Satisfied", or "Very Satisfied", while teachers expressed dissatisfaction with this same item with 57 (77.03 percent) of the 74 respondents expressing themselves as "Dissatisfied" or "Very Dissatisfied".

The third item of notable response differences between the two groups was item 7 (in-service training program) but in this case, the response pattern was reversed with satisfaction expressed by 55.70 percent of teachers contrasted with a similar expression by only 39.06 of administrators.

Although both administrators and teachers agreed that item 11 (improvements being made in facilities and teaching aids) was unsatisfactory, the extent of dissatisfaction did show considerable difference, with only 59.31 percent of the teacher group expressing dissatisfaction compared to 89.83 percent of administrators. Among the twelve items considered, in terms of dissatisfaction, this item was ranked first by administrators and was tied for third by teachers.

An additional finding of importance would seem to be that of responses of administrators and teachers regarding item 9 (training received prior to employment). It is perhaps well to note the differences in degree of satisfaction between the two groups. It seems striking to note that 22.81 percent fewer of the administrators expressed satisfaction than did teachers. This would seem to indicate that administrators feel that neither pedagogical preparation institutions of the Ministry of Education provide sufficient training needed by school personnel in administrative positions.

An examination of responses of the two groups to item 12 (in

general, with the work of the National Vo-Ag Department) yield some pertinent findings. Administrators, as a group, expressed dissatisfaction with this item, in fact, 69.49 percent responded as "Dissatisfied" including 33.90 percent as "Very Dissatisfied". Only slightly fewer teachers expressed the same judgements, that of dissatisfaction with present relationships and in general, programs of the National Office.

When data secured from each of the two groups is combined, as shown in Table XX, item 12 is found to rank third in terms of dissatisfaction among the twelve items investigated. This may reflect comparison of the older system with the new educational system and is related to regionalization. The National Vo-Ag Department has possibly resulted in a much diminished close relationship with the local schools. Actually, now under the new system, these schools are administered by the staff comprising an Education Zone which is much more regional in scope schematically. The system now ascends through local school - Educational Zone - Educational Region - Central or National level. This largely reduces the function of the National Vo-Ag Department to only that of orientation. In addition, in the Educational Zone and in the Educational Region, there are not specialized personnel related with this field.

Additionally, data shown in Table XX which present combined responses of administrators and teachers, show ranking in descending order, the following items as those with which respondents were satisfied: (1) item 5 (relationship to the fellow workers), (2) item 9 (training received prior to employment), (3) item 1 (job or position), (4) item 8 (evaluation made of performance), (5 TIE) items 6 (geographical location of work) and 10 (opportunities to use some ideas or methods), and (7)

item 3 (living quarters). In a like manner, those items with which respondents expressed some degree of dissatisfaction as ranked in ascending order, were: (1) item 11 (improvements being made in facilities and teaching aids), (2) item 2 (pay), (3) items 12 (in general, with the work of the National Vo-Ag Department), (4) item 4 (present working conditions), and (5) item 7 (in-service training program).

Administrators and Teachers Preferences Regarding Selection Aspects Pertaining to Current Position

Data shown in Tables XXI, XXII, and XXIII reflect responses to a simple yes-no approach, but was structured in such a manner as to inquire about two selections: (1) present situation, and (b) my desire.

Findings presented in Table XXI show that 50 percent of administrators reported they were working in the same region where they were born; however, their desire to work there was reported as "yes" by 79.69 percent. Data also reveal that 89.06 percent of the administrator respondents were working in the same field in which they were trained; since these responses were made by administrators, it is assumed that they responded as those trained in agriculture rather than administration.

Additional findings reported in Table XXI reveal that 51.56 percent of administrators report that the Ministry of Education provides facilities for them and their families to live near the schools while the percentage figure showing those desiring such service is even higher, 90.63 percent. However, in terms of "satisfaction" with present living quarters, it should be noted that administrator responses presented earlier in Table XVIII, item number 3, 70.31 percent expressed "satisfaction".

Apparently, even though some living in government furnished housing, and expressing satisfaction are still desirous of obtaining government housing.

TABLE XXI

ADMINISTRATOR PREFERENCES REGARDING SELECTED ASPECTS PERTAINING TO CURRENT POSITION TOTAL 64

Selected Aspects	Present Situation Yes No.	Present Situation Yes %	Present Situation No No.	Present Situation No %	My Desire Yes No.	My Desire Yes %	My Desire No No.	My Desire No %
1. Are you working in the same region where you were born?	32	50.00	32	50.00	51	79.69	13	20.31
2. Are you working in the same field in which you were trained?	57	89.06	7	10.94	60	93.75	4	6.25
3. Does the Ministry of Education offer facilities for you and your family to live nearby the school?	33	51.56	31	48.44	58	90.63	6	9.37

By contrast, teacher responses as shown in Table XXII reveal that only 7.23 percent of them have access to government supplied housing. An overwhelming 97.59 percent desire such service. This finding would seem compatible with that shown in Table XIX in which 58.44 percent of teachers express dissatisfaction with housing.

TABLE XXII

TEACHER PREFERENCES REGARDING SELECTED ASPECTS PERTAINING TO CURRENT POSITION TOTAL 83

Selected Aspects	Present Situation Yes No.	Present Situation Yes %	Present Situation No No.	Present Situation No %	My Desire Yes No.	My Desire Yes %	My Desire No No.	My Desire No %
1. Are you working in the same region where you were born?	20	24.10	63	75.90	65	78.31	18	21.69
2. Are you working in the same field in which you were trained?	67	80.72	16	19.28	83	100	0	0
3. Does the Ministry of Education offer facilities for you and your family to live nearby the school?	6	7.23	77	92.77	81	97.59	2	2.41

An additional finding shown in Table XXII reveals that approximately one-fourth of the responding teachers are now teaching in the region where they were born, in contrast with a 78.31 percent that desire to work in the region of their nativity.

It would seem noteworthy that 80.72 percent of teachers reported that they are now working in the same field in which they were trained, with 100 percent desiring that they could do so.

Table XXIII presents data for combined responses of administrators and teachers. These data reveal that the percentage desiring each of the selected aspects presented for response is much higher than

percentages reflecting present situation.

TABLE XXIII

COMBINED ADMINISTRATOR-TEACHER PREFERENCES
REGARDING SELECTED ASPECTS PERTAINING
TO CURRENT POSITION
TOTAL 147

Selected Aspects	Present Situation Yes No.	Present Situation Yes %	Present Situation No No.	Present Situation No %	My Desire Yes No.	My Desire Yes %	My Desire No No.	My Desire No %
1. Are you working in the same region where you were born?	52	35.37	95	64.63	116	78.91	31	21.09
2. Are you working in the same field in which you were trained?	124	84.35	23	15.65	143	97.28	4	2.72
3. Does the Ministry of Education offer facilities for you and your family to live nearby the school?	39	26.53	108	73.47	139	94.56	8	5.44

Educators Response as to Distance of Home From School

When data shown in Table XXIV is examined, it would seem rather revealing to discover that while 18.14 percent of administrators travel from home to school in excess of 150 kilometers, an overwhelming 43.38 percent of teachers do so. Combined responses of the two groups reveal

32.65 percent of respondents are traveling 50 kilometers or less to school where employed.

TABLE XXIV

EDUCATOR RESPONSES AS TO DISTANCE OF HOME FROM SCHOOL WHERE EMPLOYED

Distance in Kilometers	Teacher Responses		Administrator Responses		Both Responses	
	No.	%	No.	%	No.	%
50 or less	14	16.86	34	53.13	48	32.65
150 to 51	33	39.76	18	28.13	51	34.70
250 to 151	20	24.10	2	3.12	22	14.97
350 to 251	2	2.41	6	9.37	8	5.44
450 to 351	8	9.64	0	0	8	5.44
More than 451	6	7.23	4	6.25	10	6.80
Total	83	100.00	64	100.00	147	100.00

Even more striking is the revelation that over one-half of administrators live 50 kilometers or less from the school, while only one-sixth of the teachers enjoyed living this close. These findings are in concordance with those reported above related to data in Tables XX through XXIII.

Frequency of Administrator and Teacher Performance Evaluation

Data presented in Table XXV provide a summary of responses received from administrators and from teachers, to the frequency with which they receive performance evaluations. While 43.75 percent of administrators report the frequency of performance evaluation to be annually, this contrast with teachers responses indicating only 8.43 percent recognizing that they received any performance evaluation annually.

TABLE XXV

EDUCATOR RESPONSES AS TO FREQUENCY OF THEIR PERFORMANCE EVALUATIONS

Frequency	Administrator Responses		Teacher Responses		Both Responses	
	No.	%	No.	%	No.	%
Each Year	28	43.75	7	8.43	35	23.81
Each 2 Years	0	0	0	0	0	0
Each 3 Years	0	0	0	0	0	0
Each 4 Years or more	0	0	27	32.53	27	18.37
Never	36	56.25	49	59.04	85	57.82
Total	64	100.00	83	100.00	147	100.00

Further, all administrators either reported in the affirmative as

receiving an annual evaluation or in the negative as never receiving an evaluation. It would seem remarkable that 56.25 percent of administrators never experienced formal evaluation.

Likewise almost 60 percent of teachers express the situation of having no evaluation, while it is true that one-third of the teachers recognized that performance evaluation had occurred each "4 years or more" there may be some questions as to the nature and extent of the evaluation to which they are referring.

Persons Presently Making Performance Evaluation and Those Preferred by Respondents

Findings as presented in Table XXVI reveal responses received from administrators and teachers regarding persons presently making performance evaluation and those preferred by respondents. It is important to note that 90.62 percent of administrators reported that presently no one is making formal evaluation of their performance. Further, only one respondent comprising less than one percent of the group indicated preference that no one make evaluation of his performance. It is noteworthy that 59 or 92.19 percent of administrators felt that evaluation by one national agricultural education supervisor would be desirable.

It is further interesting to find that over one-fifth of administrators checked community council representative as desirable person to be involved in evaluation. This is striking finding when we observe that presently administrators recognize that no council community representative is involved in evaluation.

In contrast to responses by administrators only one-third of the teachers reported that presently no one is making evaluation. However,

TABLE XXVI

PERSONS PRESENTLY MAKING FORMAL PERFORMANCE EVALUATION AND THOSE PREFERRED BY RESPONDENTS

	Administrator Responses No. 64				Teacher Responses No. 83			
	Individuals Presently Evaluating		Individuals Preferred For Evaluation		Individuals Presently Evaluating		Individuals Preferred For Evaluation	
Individuals Preferred	Number Indicating	%	Number Indicating	%	Number Indicating	%	Number Indicating	%
National Agricultural Education Supervisor	8	12.50	59	92.19	2	2.41	9	10.84
State Supervisor	12	18.75	22	34.38	4	4.82	12	14.46
Director	13	20.31	21	32.81	27	32.53	57	68.67
Sub-Director	3	4.69	10	15.63	4	4.82	12	14.46
General Coordinator	5	7.81	8	12.50	16	19.28	22	26.51
Fellow Teacher	9	14.06	12	18.75	22	26.51	23	27.71
Community Council Representative	0	0.00	14	21.88	0	0.00	10	12.05
No One	58	90.62	1	1.56	26	31.33	2	2.41
Total Number of Responses	108	*	147	*	101	*	147	*

* Some Respondents indicated more than one individual and/or preference.

in keeping with the feeling of administrators only two or 2.41 percent of teacher respondents indicated preference that no one makes such evaluation.

An additional important finding derived from examination of teacher responses is that there are no marked differences between the two categories neither with regard to recognizing persons presently involved nor preferences for individuals to be involved in their evaluation. Bearing out the validity of this finding in the fact that for both categories they ranked them in the following order, yielding congruent percentage figures for present and preferred responses, respectively: (1) Director, 32.53, 58.67; (2) Fellow Teacher, 26.51, 27.71; and (3) General Coordinator, 19.28, 26.51.

Findings collated in Table XXVII reveal combined responses from administrators and teachers. In this table it is of further value to note two important situations, first, that the highest percentage of respondents reveal that no one is presently making evaluations. Such was the response of 84 individuals, or 57.14 percent of the total group. Second, that actually community council representatives are presently not participating in making evaluations. This was the report of all 147 of the respondents (0.00 percent). However, it is most important to note that 16.33 percent indicated that they would welcome community council. Since this idea was probably a very new concept to respondents this response can be considered a favorable one.

Courses Judged as Contributing Most to Agriculture and Rural Development

Findings presented in Table XXVIII show voluntary responses of

TABLE XXVII

PERSONS PRESENTLY MAKING FORMAL PERFORMANCE EVALUATION AND THOSE PREFERRED BY RESPONDENTS (N = 147)

	Individuals Presently Evaluating		Individuals Preferred For Evaluation	
Individuals Preferred	Number Indicating	%	Number Indicating	%
National Agricultural Education Supervisor	10	6.80	68	46.26
State Supervisor	16	10.88	34	23.13
Director	40	27.22	78	53.06
Subdirector	7	4.76	22	14.97
General Coordinator	21	14.29	30	20.41
Fellow Teacher	31	21.09	35	23.81
Community Council Representive	0	0.00	24	16.33
No One	84	57.14	3	2.04
Total Number of Responses	209	*	294	*

* Some respondents indicated more than one individual and/or preference.

TABLE XXVIII

VOLUNTARY RESPONSES* OF EDUCATORS AS TO COURSES JUDGED AS CONTRIBUTING MOST TO AGRICULTURE AND RURAL DEVELOPMENT

Subjects (Courses)	Administrator Responses No.	Rank	Teacher Responses No.	Rank	Both Responses No.	Rank
1. General Crop Plants	15	3	35	1	50	1
2. Livestock Care & management	19	1	22	6	41	2
3. Agricultural Extension	14	4_{TIE}	23	4_{TIE}	37	3
4. Agricultural Mechanics	18	2	16	7_{TIE}	34	4_{TIE}
5. General Agriculture	11	7_{TIE}	23	4_{TIE}	34	4_{TIE}
6. Irrigation and Drainage	8	12_{TIE}	26	3	34	4_{TIE}
7. Plant Pathology	0	0	29	2	29	7_{TIE}
8. Animal Health	14	4_{TIE}	15	9_{TIE}	29	7_{TIE}
9. General Zootechnics	12	6	9	14_{TIE}	21	9_{TIE}
10. Forage Crops	11	7_{TIE}	10	12_{TIE}	21	9_{TIE}
11. Entomology	8	12_{TIE}	10	12_{TIE}	18	11_{TIE}
12. Agricultural Economics	10	9	8	16_{TIE}	18	11_{TIE}
13. Natural Resources Conservation	9	10_{TIE}	9	14_{TIE}	18	11_{TIE}
14. Animal Improvement	9	10_{TIE}	7	18_{TIE}	16	14_{TIE}
15. Topography	0	0	16	7_{TIE}	16	14_{TIE}
16. Artifitial Insemination	0	0	15	9_{TIE}	15	16
17. Animal Nutrition	7	14	4	22_{TIE}	11	17_{TIE}
18. Soils and Fertilizers	0	0	11	11	11	17_{TIE}
19. Milk and Milk Products	0	0	8	16_{TIE}	8	19
20. Animal Feeding	0	0	5	19_{TIE}	5	20_{TIE}
21. Rural Constructions	0	0	5	19_{TIE}	5	20_{TIE}
22. Plant Propagation	0	0	5	19_{TIE}	5	20_{TIE}
TOTAL	165		311		476	

* Responses made to open ended questions

administrators, teachers and combination of both made to open-ended questions as to courses judged as contributing most to agriculture and rural development.

Data, as shown in Table XXVIII, reveal that administrators named 14 courses as contributing most to agriculture and rural development while teachers expressed 22 ones. The first ten courses ranked in descending order are, for administrators: (1) livestock care and management, (2) agricultural mechanics, (3) general crop plants, (4 TIE) agricultural extension and animal health, (6) general zootechnics, (7 TIE) general agriculture and forage crops, (9) agricultural economics, and (10 TIE) natural resources conservation and animal improvement. For teachers are: (1) general crop plants, (2) plant pathology, (3) irrigation and drainage, (4 TIE) agricultural extension and general agriculture, (6) livestock care and management, (7 TIE) agricultural mechanics and topography, and (9 TIE) animal health and artificial insemination.

In a like manner, the combined responses are: (1) general crop plants, (2) livestock care and management, (3) agricultural extension, (4 TIE) agricultural mechanics, general agriculture and irrigation and drainage, (7 TIE) plant pathology and animal health, and (9 TIE) general zootechnic and forage crops.

Further examination of data reveals that the majority of administrators were trained with major emphasis in animal science, while teachers seem to come largely in crop production.

Educator Judgements Regarding Possible Encouragement of Children for Selected Careers in Agricultural Education

Voluntary responses of administrators and teachers to certain open-ended questions.

Summary of responses regarding career as an agricultural teacher:

1. Affirmative Answers:

a. in Venezuela the agricultural field is in decadence.

b. agricultural instruction is essential for the development of all agricultural activity.

c. to stimulate agricultural production to a major extent in zones presently marginal.

d. vocational agricultural education occupies a position calling for priority in the development of the country.

e. children of the community would be better able to know the region and its problems.

2. Negative Answers:

a. currently are not sufficient places for employment.

b. in agricultural education there is not sufficient opportunities for specialization.

c. this field of work is too often or not favorably acknowledged in Venezuela.

d. not every one can be a teacher.

e. every person should be able to make their own career choice.

f. regretfully, national agricultural education is often subjected to political pressures.

TABLE XXIX

RESPONSES AS TO DESIRABILITY OF CAREERS IN AGRICULTURE FOR CHILDREN

Question	Response			
	Yes		No	
	No.	%	No.	%
Do you think that children now living in your community, including your own children, should be encouraged to become:				
A. Agricultural Teachers				
Total Responses: 132	58	43.94	74	56.06
B. Agricultural Extension Workers				
Total Responses: 121	82	67.77	39	32.23

g. it is a profession not enjoying prestige and often given little attention in Venezuela.

h. the Ministry of Education seldom offers needed incentives which might encourage teachers of agricultural education, this in comparison to teachers in the rural sectors.

i. there are many areas in addition to agricultural education which call for priorities for economical-social development.

j. there are many ill conceived and mismanaged facets of work in the Ministry of Education.

k. there is a dearth of planning between developmental divisions and agricultural education programs.

l. it is a profession of many limitants.

m. the agricultural schools lack resources and plans for expansion, particularly technical teaching improvement.

n. at this time Venezuela has a high requirement for specialized manpower.

Summary of responses regarding career as an agricultural extension worker.

A. Affirmative answers

a. they provide a needed message of support and encouragement to small farmers.

b. they often provide, in an efficient manner, very useful technical assistance.

c. they are successful in attempts to give orientation to farmers with regard to new technology.

d. they know the idiosincracies and problems of the rural people.

e. to facilitate farmers attempt to secure needed resources and tools for obtaining better yields.

f. there is a lack of sufficient total workers in this service at all levels.

g. it is necessary to raise the level of understanding and ambition among the peasants.

h. it must be recognized as a priority for the development of the country.

B. Negative Answers:

a. are not provided resources and improved conditions in order to make their labour more effective.

b. everyone should choose their own profession.

c. small opportunity to advance in this field of work.

d. there is too often a lack of concern for the improvement of extension programs.

Data Descriptive of Farmers Living Nearby Vo-Ag Schools

Level of Farmers' Attainment

Findings shown in Table XXX reveal that 76 of the 130 farmers or 58.47 percent of farmer respondents reported having six years or less of primary school. It is important to note that slightly more than one-fourth of farmer respondents expressed having six years or less of high school, while no farmer reported four years or more at the university, only 21 or 16.15 percent have three years or less of higher education.

TABLE XXX

LEVELS OF EDUCATIONAL ATTAINMENT AS REPORTED BY FARMERS

Level of Attainment	Responses	
	No.	%
0 to 3 years of Primary School	33	25.39
4 to 6 years of Primary School	43	33.08
1 to 3 years of High School	11	8.46
4 to 6 years of High School	22	16.92
1 to 3 years of University	21	16.15
4 or more years of University	0	00.00
Total	130	100

Farmers' Relative Acquaintanceship with Vocational Agricultural Educators

Data shown in Table XXXI reflect farmer responses as to their relative acquaintanceship with vocational agricultural administrators and teachers. Since no items earned a mean score of 3.50 or above, it is evident that, as a group, farmers cannot be recognized as "very well" degree of acquaintanceship with any vocational agricultural administrators and teachers.

It would seem that the farmers seem to know the first aged teacher better than they did the director and particularly the subdirector as is shown in the following ranking made in descending order: (1) first aged teacher (somewhat), (2) director (somewhat), (3) second aged teacher (somewhat), (4) third aged teacher (little), (5) subdirector (little), (6) fourth aged teacher (little), and (7) fifth aged teacher (little).

Data Descriptive of the Relationship With School Community Development

Data shown in Tables XXXII, XXXIII, XXXIV, and XXXV reflect responses from administrators, teachers, combined of both and farmers regarding to extent of participation in selected aspects of development through the Vo-Ag schools.

Since all items are between 1.50 to 2.49 it is evident that, as a group, either administrators, or teachers, or farmers have an extent of involvement of "seldom" with the only exception of item number 6. Table XXXII, regarding administrator responses, shows that they have visited with leaders of their community in a 50 percent "sometime", besides 12.50 percent often getting a mean of 2.63.

TABLE XXXI

FARMER RESPONSES AS TO THEIR RELATIVE ACQUAINTANCESHIP WITH VOCATIONAL AGRICULTURAL EDUCATORS

		Degree of Acquaintenceship										
Educator Identity	Total Responding	Very well No.	%	Somewhat No.	%	Little No.	%	None No.	%	Cumulative Rating	Mean	Rank
Director	130	47	36.15	29	22.31	22	16.92	32	24.62	351	2.70	2
Sub-Director	89	11	12.36	22	24.72	22	24.72	34	38.20	188	2.11	5
First Aged Teacher	83	36	43.37	18	21.69	7	8.43	22	26.51	234	2.82	1
Second Aged Teacher	86	25	29.07	25	29.07	7	8.14	29	33.72	218	2.53	3
Third Aged Teacher	94	11	11.70	25	26.60	22	23.40	36	38.30	199	2.12	4
Fourth Aged Teacher	87	4	4.60	22	25.29	25	28.73	36	41.38	168	1.93	6
Fifth Aged Teacher	100	14	14	14	14	18	18	54	54	188	1.88	7

TABLE XXXII

DISTRIBUTION OF ADMINISTRATOR RESPONSES WITH REGARD TO EXTENT OF INVOLVEMENT WITH SELECTED ASPECTS OF COMMUNITY DEVELOPMENT (TOTAL 64)

Inquiry About Involvement	Always No.	%	Often No.	%	Sometime No.	%	Seldom No.	%	Never No.	%	Total No.	Cumulative Rating	Mean of All Responses	Rank
1. How often do you participate in community meetings of a farmer association?	0	0	0	0	14	21.88	25	39.06	25	39.06	64	117	1.83	4
2. How often do you participate with community groups other than the school in problem-solving?	0	0	13	20.31	8	12.50	24	37.50	19	19.69	64	143	2.23	2
3. How often have you sought to involve farmers in your school projects?	0	0	0	0	31	48.43	14	21.88	19	29.69	64	140	2.19	3
4. How often have you sought to involve farmers in your teaching-program?	0	0	0	0	17	26.56	14	21.88	33	51.56	64	112	1.75	5
5. How frequently have you invited the farmers to visit the school farm-projects?	0	0	3	4.69	1	1.56	16	25.00	44	68.75	64	91	1.42	6
6. How often have you visited with leaders of the community?	0	0	8	12.50	32	50.00	16	25.00	8	12.50	64	168	2.63	1

TABLE XXXIII

DISTRIBUTION OF TEACHER RESPONSES WITH REGARD TO EXTENT OF INVOLVEMENT WITH SELECTED ASPECTS OF COMMUNITY DEVELOPMENT (TOTAL 83)

Inquiry About Involvement	Always No.	%	Often No.	%	Sometime No.	%	Seldom No.	%	Never No.	%	Total No.	Cumulative Rating	Mean of All Responses	Rank
1. How often do you participate in community meetings of a farmer association?	7	8.43	10	12.05	24	28.92	13	15.66	29	34.94	83	202	2.43	1
2. How often do you participate with community groups other than the school in problem-solving?	13	15.66	1	1.21	19	22.89	15	18.07	35	42.17	83	191	2.30	3
3. How often have you sought to involve farmers in your school projects?	1	1.21	27	32.53	6	7.23	17	20.48	32	38.55	83	197	2.37	2
4. How often have you sought to involve farmers in your teaching-program?	0	0	13	15.66	6	7.23	27	32.53	37	44.58	83	161	1.94	5
5. How frequently have you invited the farmers to visit the school farm-projects?	0	0	1.	1.21	32	38.55	17	20.48	33	39.76	83	167	2.01	4
6. How often have you visited with leaders of the community?	3	3.61	1	1.21	3	3.61	38	45.78	38	45.78	83	142	1.71	6

TABLE XXXIV

DISTRIBUTION OF COMBINED ADMINISTRATOR-TEACHER RESPONSES WITH REGARD TO EXTENT OF INVOLVEMENT WITH SELECTED ASPECTS OF COMMUNITY DEVELOPMENT (TOTAL 147)

Inquiry About Involvement	Always No.	%	Often No.	%	Sometime No.	%	Seldom No.	%	Never No.	%	Total No.	Cumulative Rating	Mean of All responses	Rank
1. How often do you participate in community meetings of a farmer association?	7	4.76	10	6.80	38	25.85	38	25.85	54	36.74	147	319	2.17	3
2. How often do you participate with community groups other than the school in problem-solving?	13	8.84	14	9.52	27	18.37	39	26.53	54	36.74	147	334	2.27	2
3. How often have you sought to involve farmers in your school projects?	1	0.68	27	18.37	37	25.17	31	21.09	51	34.69	147	337	2.29	1
4. How often have you sought to involve farmers in your teaching-program?	0	0.00	13	8.84	23	15.65	41	27.89	70	47.62	147	273	1.86	5
5. How frequently have you invited the farmers to visit the school farm-projects?	0	0.00	4	2.72	33	22.45	33	22.45	77	52.38	147	258	1.76	6
6. How often have you visited with leaders of the community?	3	2.04	9	6.12	35	23.81	54	36.74	46	31.29	147	310	2.11	4

TABLE XXXV

FARMER RESPONSES AS TO THE EXTENT OF PARTICIPATION IN SELECTED ASPECTS OF DEVELOPMENT THROUGH THE VO-AG SCHOOL

Inquiry About Involvement	Always No.	%	Often No.	%	Sometime No.	%	Seldom No.	%	Never No.	%	Total No.	Cumulative Rating	Mean of All Responses	Rank
1. How often do the teacher(s) participate in farmer association meeting?	14	10.77	4	3.08	32	24.61	22	16.92	58	44.62	130	282	2.17	3
2. How often do the teacher(s) participate in community problem-solving?	4	3.08	6	4.61	35	26.92	31	23.85	54	41.54	130	265	2.04	4
3. How often have you been involved in school-farm production projects?	3	2.31	5	3.85	11	8.46	7	5.38	104	80.00	130	186	1.43	7
4. How often have you been involved in discussing the teacher in determining what to teach in his school?	6	4.61	3	2.31	13	10.00	15	11.54	93	71.54	130	204	1.57	6
5. How often have you been invited to visit the school-farm projects?	12	9.23	8	6.15	43	33.08	10	7.69	57	43.85	130	298	2.29	1
6. How often have you been invited to participate in school-short courses?	7	5.38	9	6.92	40	30.77	21	16.15	53	40.77	130	286	2.20	2
7. How often have you attended such invitations?	5	3.85	8	6.15	25	19.23	33	25.39	59	45.38	130	257	1.98	5

Additional findings from administrator responses reveal the following ranking in descending order: (1) item 6 (How often have you visited with leaders of the community?), (2) item 2 (How often do you participate with community groups other than the school in problem-solving?), (3) item 3 (How often have you sought to involve farmers in your school projects?), (4) item 1 (How often do you participate in community meetings of a farmer association?), (5) item 4 (How often have you sought to involve farmers in your teaching programs?) and (6) item 5 (How frequently have you invited the farmers to visit the school farm-projects?).

Findings in Table XXXIII regarding teacher responses show ranking in descending order, the following items as those with which respondents had an extent of involvement of "seldom": (1) item 1, (2) item 3, (3) item 2, (4) item 5, (5) item 4, and (6) item 6. It is further important to note that all teacher respondents expressed a highest percentage as a never being between 34.94 percent, the minimum, and 45.78, the maximum.

Data, as shown in Table XXXIV with regard to combined responses of administrators and teachers, noteworthy reveal that added together the columns "seldom" and "never" give, as a result, a minimum percentage in all items of 55.78 being more notable the item number 5 with 52.38 percent in the column of "never". Finally, the ranking in descending order are: (1) item 3, (2) item 2, (3) item 1, (4) item 6, (5) item 4, and (6) item 5.

Table XXXV presents data from farmer responses who expressed a marked difference with responses of administrators and teachers in those items in where was the same questions for all groups. Farmers reported a highest percentage of "never" involvement being the minimum 41.54.

Even more striking is the revelation that 104 of 130 or 80.00 percent of farmer respondents have never been involved in school-farm production projects, as well as 93 or 71.54 percent of farmer respondents have never been involved in discussing with teachers in determining what to teach in their schools.

Data as shown in Table XXXV reflect, ranking in descending order, the following items: (all with an extent of "seldom") (1) item 5, (2) item 6, (3) item 1, (4) item 2, (5) item 7, (6) item 4, and (7) item 3.

Selected Voluntary Comments from Administrator and Teacher Respondents

The following are selected comments from administrator and teacher respondents which the investigator considered representative. These comments were selected because they are samples indicative of the vari ety of responses. Overall, the basic opinions are illustrated by the responses below with the numbers in parentheses being the number of individuals so responding.

(16) 1. this kind of investigation is necessary to provide the Ministry of Education some thought as to their workers and to make known the actual situation of agricultural education in Venezuela.

(8) 2. the findings of this research may serve to better make clear the parameters of problem-solving in Venezuelan agricultural education; this for the benefit of both educators and students.

(20) 3. it is important that the national department of agricultural education takes into consideration the information of this investigation in order to improve the school conditions and increase the

effectiveness of extension programs for small farmers.

(4) 4. it points the way toward seeking to provide a mechanism to make more fully understood actual work conditions faced by teachers and administrators. This will emphasize the fact that we accomplish our duties and responsibilities because we feel pride in our profession and want to share greater accomplishment with each other.

(2) 5. unfortunately, this survey does little to stimulate to the formulation of possible solutions for the problems identified.

(5) 6. the desired relationship between school and community exists in but few agricultural schools in Venezuela. This may be because it does not appeal nationally in a political sense. For as much as it is now in hands of Regional Direction of Education, limitations are extant which curtail achievement of many desired functions.

(4) 7. quite often, in Venezuela, there is little or no long-range planning of a serious nature. Only seldomly is there any continuity of plans and programs. Far too often the excessive improvization is of little real value, being very theoretical.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this chapter is to present a summary review of the study problem, the design and conduct of the study and the major findings. Also presented are conclusions and recommendations which are based upon analysis and summarization of data collected and upon observation and impressions resulting from the design and conduct of the study.

Summary of the Study

The intent of the study was to determine the appropriate role of secondary agricultural education in assisting to bring about development which may result in more abundant life for rural inhabitants. A collateral or substantive integral purpose was to assess perceptions of secondary agricultural school administrators, teachers, and of farmers as to (1) present status and (2) future needs for rural development in Venezuela.

Objectives of the Study

To achieve the purpose of the study, the following objectives were formulated and served as guidelines for designing and conducting the investigation.

1. To briefly describe the present situation of rural development

in Venezuela.

2. To describe the present status of secondary agricultural education in the vocational schools of Venezuela.

3. To obtain judgements regarding present effectiveness and improvements needed in secondary agricultural education.

4. To determine relationships existing between rural development and vocational agricultural education at the middle level.

5. To make recommendations for changes in secondary agricultural education which may enhance effectiveness of rural development in Venezuela.

Design and Conduct of the Study

Following a review of previously completed research and literature related to the problem, the major tasks involved in the design and conduct of the study were: (1) selecting the study population, (2) developing an instrument for data collection, (3) collecting data, (4) collating data, and (5) analyzing the findings.

The study population consisted of three categories of respondents: (1) administrators, (2) teachers of Vo-Ag schools, and (3) farmers living nearby those schools. For the administrator's category, respondents were selected by random sample among 40 directors, 30 subdirectors, and 40 coordinators, totaling a group of 24, 24, and 30, respectively. For respondents in the teacher's category, random sample selection among 230 full-time teachers and 120 part-time teachers resulted in a sample with numbers of 69 and 36, respectively. Finally, among the target population of 500 farmers a sample of 150 was taken. Regarding responses returned, there were 19 (79.16 percent) of directors, 29 (83.33 percent)

of subdirectors, 25 (83.33 percent) of coordinators, 56 (81.16 percent) of full-time teachers, 27 (75.00 percent) of part-time teachers, and 130 (86.67 percent) of farmers providing a total of 277 (83.18 percent) usable response questionnaires. Data so secured, collated, and analyzed provided the base from which findings of the study led to conclusions drawn and recommendations made.

Summary of Findings Descriptive of Rural and Community Development Situations

Extent to which Selected Problem Areas are Associated with Agricultural and Rural Development

Findings presented as a summary in Table XXXVI show a marked difference between responses of the two groups, (1) administrators and teachers and (2) farmers. It is extremely noteworthy that farmers express as a "moderate problem" all items except one, which was felt to be "a severe problem", this was technical assistance by farmer cooperative associations. Since all other items associated with agricultural and rural development were felt to be "a moderate problem" and since items directly related to agriculture ranked lower as contrasted to items more directly related to family life, it would seem that community-school relationships should be given a priority for consideration. Such efforts would include (1) adequate family planning information and service, (2) wholesome entertainment for the family (sport and meeting place), (3) sanitation (black-water), (4) financing by farmer cooperative association, and (5) adequate health service.

TABLE XXXVI

SUMMARY OF JUDGEMENTS OF EDUCATORS AND FARMERS REGARDING THE EXTENT TO WHICH SELECTED PROBLEM AREAS ARE ASSOCIATED WITH AGRICULTURAL AND RURAL DEVELOPMENT

AREAS	Administrators & Teachers Responses		Farmer Responses	
	Group Mean Score Category	Group Ranking	Group Mean Score Category	Group Ranking
A. Farm Production and Marketing Section				
1. Opportunity to learn about improved farming methods	Sm. Prob.	22	Mod. Prob.	17
2. Ability of extension workers to explain new or improved farming methods.	Sm. Prob.	24	Mod. Prob.	22
3. Usefulness of information provided by extension workers to small farmers.	Sm. Prob.	20	Mod. Prob.	15
4. Farming productivity	Sm. Prob.	18TIE	Mod. Prob.	20TIE
5. Prices received for farm products	Sm. Prob.	23	Mod. Prob.	10
6. Cost of materials for farming operation	Mod. Prob.	2	Mod. Prob.	19
7. Resources available for production and marketing:				
A. Credits	Sm. Prob.	27	Mod. Prob.	13TIE
B. Land	Sm. Prob.	25	Mod. Prob.	16
C. Markets	Sm. Prob.	14TIE	Mod. Prob.	23
D. Roads	Sm. Prob.	10	Mod. Prob.	18
E. Storage	Sm. Prob.	18TIE	Mod. Prob.	25TIE
F. Seed	Mod. Prob.	8	Mod. Prob.	11
G. Fertilizer	Mod. Prob.	7	Mod. Prob.	9
8. Farmer cooperative association:				
A. Organization	Sm. Prob.	11TIE	Mod. Prob.	8
B. Management	Mod. Prob.	9	Mod. Prob.	13TIE
C. Financing	Sm. Prob.	14TIE	Mod. Prob.	6
D. Technical Assistance	Sm. Prob.	26	Sev. Prob.	1
B. Family Life Section				
9. Opportunity for children to receive education.	Mod. Prob.	3	Mod. Prob.	24
10. Adequate health service	Sm. Prob.	16	Mod. Prob.	7
11. Adequate family planning information and service.	Sm. Prob.	17	Mod. Prob.	2
12. Sanitation:				
A. Black-water	Sm. Prob.	13	Mod. Prob.	5
B. Latrine	Mod. Prob.	5TIE	Mod. Prob.	12
13. Clear, safe, adequate drinking water.	Mod. Prob.	5TIE	Mod. Prob.	25TIE
14. Wholesome entertainment for the family				
A. Sports	Sm. Prob.	21	Mod. Prob.	3
B. Television	Mod. Prob.	4	Mod. Prob.	20TIE
C. Radio	Mod. Prob.	1	Mod. Prob.	27
D. Meeting Place	Sm. Prob.	11TIE	Mod. Prob.	4

Administrators and teachers responded in a somewhat similar manner to that of farmers except that of the total 27 items and subitems, nine were considered as "a moderate problem" with 18 as only "a small problem", as contrasted with farmer responses considered to be "a moderate problem" were the following items in the family life section, which educators considered only as "a small problem": adequate health service, adequate family planning information and service, sanitation (blackwater), wholesome entertainment for the family (sport and meeting place).

Some of the items pertaining more to agricultural production which farmers recognized as "a moderate problem" and educators "a small problem" are (1) resources available for production and marketing: (a) credits, (b) land, (c) markets, (d) roads, (e) storage; (2) farmer cooperative association: (a) organization, (d) technical assistance; (3) ability of extension workers to explain new or improved farming methods; (4) prices received for farm products; and (5) farming productivity.

Areas Most Needing Improvement for Effective Rural Community Development

It is important to note that administrators and teachers reported quite similar opinions regarding the areas most needing improvement. Also it should be recognized that the number of teacher respondents is higher than that of administrators. The ranking order for the combined responses of both groups is presented in Table XVI, not very different to that expressed by teachers alone are: (1) medical assistance, (2) public services, (3) technical assistance, (4) land and credits, (5) education, (6) agricultural production, (7) agricultural roads, (8) marketing, (9) entertainment and (10) family living.

Summary of Findings of the Study from Research

Summary of Findings Descriptive of the Secondary Vocational Agricultural Program

Tenure of Agricultural Educators. It was found that 42.10 and 45.00 percent of responding directors and subdirectors, respectively, reported having 7-10 years tenure in the Ministry of Education, while 72.00 percent of coordinators reported a tenure of 4-6 years. Responses collated in Table XVII reveal that teachers reported that they had a much lower tenure with more than 40.00 percent in the 1-3 year category.

Administrator and Teacher Satisfaction with Selected Aspects of Their Job. Findings as presented in Table XXXVII reveal that both administrators and teachers are satisfied with the following items: 1, 5, 6, 8, 9, and 10. In a like manner, they are dissatisfied with items: 2, 11, and 12. Also was found that administrators and teachers expressed notably yielding different responses with the items: 3, 4, and 7. Related with the items: 3 and 4 administrators expressed themselves as "satisfied" while teachers were "dissatisfied". The same with item 7, administrators were "dissatisfied" and teachers "satisfied".

Administrators and Teachers' Preferences Regarding Selected Aspects Pertaining to Current Positions. Findings as presented in Table XXI show that 50 percent of administrators reported they were working in the same region where they were born. However, as a group, they desired to have such residence, with "yes" reported by 79.69 percent. Data also reveal that 89.06 percent of administrator respondents were working in the same field in which they were trained.

SUMMARY OF RESPONSES OF ADMINISTRATORS AND TEACHERS REGARDING SATISFACTION WITH SELECTED ASPECTS OF THEIR JOB

Item of Concern	Administrator Mean Responses	Administrator Category	Teacher Mean Responses	Teacher Category	Combined Mean Responses	Combined Category
1. With your Job	3.02	Sat.	2.82	Sat.	2.91	Sat.
2. With your Pay	2.19	Dissat.	2.05	Dissat.	2.11	Dissat.
3. With your living (housing, etc)	2.91	Sat.	2.27	Dissat.	2.56	Sat.
4. With the Present Working Conditions	2.70	Sat.	2.15	Dissat.	2.41	Dissat.
5. With the Relationship to the Follow Workers	3.06	Sat.	3.09	Sat.	3.08	Sat.
6. With the Geographical Location Where you Work	2.63	Sat.	3.03	Sat.	2.85	Sat.
7. With the Inservice Training Program	2.16	Dissat.	2.65	Sat.	2.43	Dissat.
8. With the Evaluation Made of Your Performance	2.66	Sat.	3.01	Sat.	2.86	Sat.
9. With the Training Received Prior to Your Employment	2.78	Sat.	3.08	Sat.	2.94	Sat.
10. With the Opportunities to Use some of Your own Ideas or/and Methods	2.89	Sat.	2.82	Sat.	2.85	Sat.
11. With Improvements being Made in Facilities and Teaching Aids	1.83	Dissat.	2.27	Dissat.	2.08	Dissat.
12. In general, with the Work of the N.VO-AG D.	1.97	Dissat.	2.32	Dissat.	2.17	Dissat.

Findings collated in Table XXI reveal that 51.56 percent of administrators report that the Ministry of Education provides facilities for them to live near the school, while responses expressing such a desire was made by 90.63 percent of the administrators. This was contrasted with findings that teachers made responses (Table XXII) revealing that only 7.23 percent of them have access to government-supplied housing while an overwhelming 97.59 percent desire these services.

Distance of Home from School. It was found (Table XXIV) that over one-half of administrators live 50 kilometers or less from the school, while only one-sixth of the teachers enjoyed living this close.

Frequency of Administrator and Teacher Performance Evaluation. It would seem remarkable that findings reveal (Table XXV) that 56.25 percent of administrators report having never experienced a formal evaluation. Likewise, almost 60 percent of teachers express, also, that they experience little, if any, formal evaluation.

Persons Presently Making Performance Evaluation and Those Preferred by Respondents. It is important to note that 90.63 percent of administrators (Table XXVI) reported that presently no one is making formal evaluation of their performance. However, 92.19 percent of administrators felt that evaluation by one national agricultural education supervisor would be desirable.

An additional important finding is that an examination of teacher responses reveals less marked differences between their recognition of persons presently involved in evaluation and their preferences for individuals to be involved in their evaluation. They ranked such present and potential evaluators in the following order, yielding congruent

percentage figures for present and preferred responses, respectively: (1) Director, 32.53 percent - 58.67 percent, (2) Fellow Teacher, 26.51 percent - 27.71 percent, (3) General Coordinator, 19.28 percent- 26.51 percent.

Courses Judged as Contributing Most to Agriculture and Rural Development. Data as presented in Table XXVIII reveal that for combined responses of both administrators and teachers the courses judged as contributing most to agriculture and rural development are: (1) general crop production, (2) livestock care and management, (3) agricultural extension, (4 TIE) agricultural mechanics, general agriculture and irrigation and drainage, (7) plant pathology and animal health and (9 TIE) applied zoology (general zootechnic) and forage crops.

Judgements Regarding Possible Encouragement of Children for Selected Careers in Agricultural Education. Findings presented in Table XXIX reveal the responses that Vo-Ag administrators and teachers express regarding the question "Do you think that children now living in your community, including your own children, should be encouraged to become (1) an agricultural teacher or (2) an agricultural extension worker?" Combined answers were slightly negative ('no", 56.06 percent) for the first (1) agricultural teachers and positive ("yes", 67.77 percent) for the second (2) agricultural extension worker.

Summary of Findings Descriptive of Farmers Living Nearby the Vo-Ag Schools

Level of Educational Attainment by Farmers. Findings shown in Table XXX reveal that 58.47 percent of farmer respondents reported

having completed six years of less of primary schooling. One-fourth of farmer respondents responded as having completed six years or less of high school and only 16.15 percent have completed higher education of three years or less.

Farmer's Relative Acquaintanceship with Vocational Agricultural Educators. As is presented in Table XXXI it would seem notable that farmers seem to know the first vocational agricultural teacher somewhat better than they did the director and particularly more than the sub-director.

Data Descriptive of the Relationship between Vocational Agricultural School-Community Development. Pertinent findings regarding involvement of educators and farmers in selected aspects of school-community development is shown as a summary in Table XXXVIII. Findings reveal that neither educators nor farmers recognize that they have had much involvement in cooperative school-community effort. For each of the five selected aspects of such efforts, the responses on the scale provided as "seldom" with exception of the item "How often have the involvement of farmers in school projects been sought?" Farmers responded "never".

Data further revealed differences between the responses of the two groups as can be noted in both the ranking order and in the mean scores.

Summary of Findings Gathered From the Literature Review

What may be considered pertinent findings gathered from the literature review are:

TABLE XXXVIII

SUMMARY OF JUDGEMENTS OF EDUCATORS AND OF FARMERS REGARDING TO THE EXTENT OF PARTICIPATION IN SELECTED ASPECTS OF DEVELOPMENT THROUGH THE VO-AG SCHOOL

Inquiry About Involvement	Combined Administrator & Teacher Responses			Farmer Responses		
	Group Mean Score	Category	Group Ranking	Group Mean Score	Category	Group Ranking
1. How often do the teacher(s) participate in farmer association meeting?	2.17	Seldom	3	2.17	Seldom	2
2. How often do the teacher(s) participate in community problem-solving?	2.27	Seldom	2	2.04	Seldom	3
3. How often have sought to involve farmers in school projects?	2.29	Seldom	1	1.43	Never	5
4. How often have sought to involve farmers in teachers' teaching-programs?	1.86	Seldom	4	1.57	Seldom	4
5. How often have been invited the farmers to visit the school-farm projects?	1.76	Seldom	5	2.29	Seldom	1

1. Actually, in Venezuela three types of curriculum content are functioning in the secondary agricultural education system which are: (a) the diversified cycle with optional nucleus, (b) the semester credit system, and (c) the agricultural technical schools.

2. The selected specific strategies for achievement of integrated or balanced rural community development, as related to education, are: (a) professional preparation of rural teachers. In order to best prepare them for their role in education, particularly effectiveness in promoting rural community development, it is most essential that "tyro" teachers be carefully guided into more complete identification with the postulates of the rural sector; (b) the possible need for revision of curricula of secondary agricultural education to be descriptive of much more than a simple rearrangement of courses or change in requirements for given subjects. This may well be needed in order to more readily incorporate such essential elements of rural community development into the educational programme; (c) making the school serve as an instrument to achieve integrated development within the community; (d) expanding role of the Vo-Ag teachers in bringing about the improvement of the rural community.

3. Rural Community Development will prosper to a considerable extent dependent upon the willing and ready participation of individual leaders within the community who choose to voluntarily assume numerous responsibilities. Such leaders serve as a "catalytic agent" inspiring both professional workers and fellow citizens to effort on behalf of community development.

4. Rural and community development must consider the interdependence of all developmental sectors. These sectors include not only

agriculture and industry but also transportation, trade, credit, health, education, culture, sport and leisure activities.

5. Programs of balanced rural community development is divided into two major thrusts: (1) improvement of the quality of life, and (2) improvement of agricultural production and marketing.

6. Accomplishment of "Agrarian Reform" is absolutely essential to successful rural community development. Incentives must be provided, but such provision must be within the context of the complete economic and social milieu of the rural sectors.

Conclusions

Analyses, syntheses and interpretation of the study findings prompted the investigator to formulate certain conclusions which are detailed below:

1. Although to a very limited extent Community Education is functioning in the early stages in a few urban areas of Venezuela, little if any indication is found of its implementation into any rural area.

2. Farmers in Venezuela make clear their desire for a functioning program of vocational agriculture which incorporates many of the postulates of Integrated Rural and Agricultural Development.

3. While educators in the vocational agricultural schools seem somewhat aware of the need for directing programs toward Community Development, farmers are much aware of this need.

4. The participation of farmers in Community-School is at present very limited. In a similar manner, the participation of educators in community activities appears to be meager.

5. Job satisfaction among administrators and teachers of vocational

agricultural education in Venezuela can generally be considered as acceptable but two areas in which express a desire for improvement are: (a) higher salaries as compared to other professional workers, (b) government provided housing near the school to eliminate long drives and much time away from families.

6. Both administrators and teachers desire a more realistic and somewhat more formal system of evaluation of their efforts.

7. One of the present limiting factors for achieving Rural and Agricultural Community Development is the fact that most educators are not living within the community and consequently are very limited in their participation.

8. Less than one-half of present vocational agriculture teachers are agreeable to having their own or other children of the area become vocational agriculture teachers. However, somewhat more than one-half were agreeable to careers in Agricultural Extension for those same children. From this it is concluded that teaching agriculture does not enjoy the prestige that might be desirable, while careers in Agricultural Extension may carry somewhat more prestige.

9. The present operation of three separately identified kinds or types of systems providing instruction in vocational agriculture inhibit development of improved programs nationwide.

Recommendations

The following recommendations are presented in keeping with analysis of data obtained from responses, the literature review, and from judgements and conclusions based upon the researcher's experiences as a vocational agricultural school principal:

1. It is highly recommended that a number of efforts be initiated by ministry officials, departmental officials, school administrators and teachers to promote recognition of the unique position which vocational agricultural schools occupy in planning and implementing effective programs of integrated rural and community development.

2. It is recommended that administrator-directors of local schools, with approval from the Office of Regional Direction, initiate efforts to serve the families of school patrons in such areas as health, recreation and adult education.

3. It is strongly recommended that all institutions offering teacher preparatory programs consider adjustment of the curriculum in order that the experiences of trainees may be such that they can clearly contemplate the functional role of vocational agriculture teachers in furthering more living for families in the rural communities. Specifically this should include methods of preparing graduates as to how to initiate and maintain local school programs giving attention to health care, recreation, adult education, and other aspects of rural development.

4. It is further recommended that pedagogical preparatory institutions give attention to providing a program of studies which include school administration and supervision.

5. It is recommended that immediate attempts be made to unify programs of the various schools so that: (1) goals, (2) curriculum, and (3) instructional methods be better established. While certain flexibility may be desirable, much can be gained through joint sharing of ideas and efforts.

6. It is very essential that steps be taken to secure citizen

participation in planning, implementing and maintaining programs of community services by the school. It is recommended that local citizen advisory councils be established in each local school.

7. It is recommended that the Ministry of Education, in cooperation with one or more pedagogical institutions, plan and initiate a series of workshops and/or seminars expressly designed for in-service training of present teachers and administrators of vocational agriculture. Such seminars should concentrate on an integrative approach to rural community development in vocational agriculture schools.

8. It is recommended that the Ministry of Education make special effort to plan and implement a program of evaluation of both programs and performance of individuals educators which will be more acceptable to all involved in the vocational agriculture programs.

9. It is recommended that the Ministry of Agriculture give serious consideration to sponsorship of a student organization for vocational agriculture students of Venezuela similar to the F.F.A. (Future Farmers of America) in the United States. This could then provide for implementation of a program similar to the B.O.A.C. (Building Our American Communities).

10. Finally, attention must be given to integrating aspects of community development into local programs in such a manner that the effectiveness of instruction in agriculture not be diminished. It is hoped that this can be accomplished through a more thorough integration of agricultural operations into family and community life.

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APPENDIX A

DATA COLLECTION INSTRUMENTS

PERCEPTIONS OF ADMINISTRATORS AND TEACHERS AS TO SELECTED ASPECTS OF THE RELATIONSHIP BETWEEN VO-AG AND RURAL COMMUNITY DEVELOPMENT IN VENEZUELA

GENERAL INFORMATION OF THE SCHOOL

School Name: _____ State: _____

District: _____ Majors: _____

I. Position Held

	Present Position (Please check)	Other Position (Please check)	Total years working in this school	Total years working in the M. of E.
Director				
Sub-director				
General Coordin.				
Full time Teacher				
By hour teacher				
		TOTAL		

II. Considering each of the items listed below how do you feel about them? (Please check)

	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied
1. With your job				
2. With your pay				
3. With your living (housing, etc.) . .				
4. With the present working conditions .				
5. With the relationship to the fellow workers				
6. With the geographical location --- Where you work				
7. With the inservice training program .				
8. With the evaluation made of your performance				
9. With the training received prior to your employment				
10. With the opportunities to use some of your own ideas and/or methods . . .				
11. With improvements being made in facilities and teaching aids				
12. In general, with the work of the national VO-AG Department				

III. Please answer each of the following questions reflecting both (1) present situation and (2) what you might desire.

	Present Situation		My Desire	
	Yes	No	Yes	No
1. Are you working in the same region where you were born?				
2. Are you working in the same field in which you were trained?				
3. Does the Ministry of Education offers facilities for you and your family to live nearby the school?				

IV. How many Kms from the school is your home where you are now living with your family? (Please check)

50 or less	
150 to 51	
250 to 151	
350 to 251	
450 to 351	
More than 451	

V. 1. How frequently has your performance been submitted for formal evaluation? (Please check)

Each year	
Each 2 years	
Each 3 years	
Each 4 years or more	
Never	

2. Formal evaluation of my performance involves the following individuals: (Please check as many as applied)

	Individuals who are pres. evaluating me	Individuals who I'd desire to evaluate me
National Ag-Ed Supervisor		
State Supervisor		
Director		
Sub-Director		
General Coordinator		
Fellow Teachers		
Community Council Repres.		
No one		

VI. Relationship with the community (Please check in columm which most nearly reflects your situation).

	Always	Often	Sometimes	Seldom	Never
1. How often do you participate in community meetings of a farmer association?					
2. How often do you participate with your community groups other than the school in problem-solving?					
3. How often have you sought to involve farmers in your school projects?					
4. How often have you sought to involve farmers in your teaching-program?					
5. How frequently have you invited the farmers to visit the school farm-projects?					
6. How often have you visited with leaders of the community?					

VII. To what extend do these problem areas associated with agricultural and rural development exist in the community where your school is located?

	A severe problem	A moderate problem	A small problem	Not problem
FARM PRODUCTION AND MARKETING SECTION				
1. Opportunity to learn about improved farming methods.				
2. Ability of extension workers to explain new or improved farming methods.				
3. Usefulness of information provided by extension workers to small farmers.				
4. Farming productivity.				
5. Prices received for farm products.				
6. Cost of materials for farming operation.				
7. Resources available for production and marketing:				
A. Credits				
B. Land				
C. Markets				
D. Roads				
E. Storage				
F. Seed				
G. Fertilizer				
H. Other (write in ...)				
8. Farmer cooperative association:				
A. Financing				
B. Management				
C. Other (write in...)				
FAMILY LIFE SECTION				
9. Opportunity for children to receive education				
10. Adequate health service for the farm family				
11. Adequate family planning information and service				
12. Sanitation:				
A. Black-water				
B. Latrine (Bathroom)				
13. Clear, safe, adequate drinking water.				
14. Wholesome entertainment for the family:				

Continued ....

A. Sports.				
B. Television				
C. Radio				
D. Meeting place				
E. Other (write in ...)				

VIII. OPEN ENDED QUESTIONS

In your own words, please express your judgements about the following questions:

1. List five areas in which you feel improvement are needed if rural and community is to function at a high level in your community.

2. Do you think that children now living in your community, including your own children should be encouraged to become (a) agricultural teachers or (b) extension workers? Please say why or why not?

3. What six courses do you think are contributing most to agriculture and rural community development? Why?

4. Please express any commentary related with this survey if you wish.

PERCEPTIONS OF FARMERS AS TO SELECTED ASPECTS OF THE RELATIONSHIP BETWEEN VO-AG AND RURAL COMMUNITY DEVELOPMENT IN VENEZUELA

GENERAL INFORMATION OF THE FARM

Distance from the school: _____ Amount of hectares: _____

I. What is the highest grade completed in school? (Please check)

- 0 to 3 years of primary school ___
- 4 to 6 years of primary school ___
- 1 to 3 years of high school ___
- 4 to 6 years of high school ___
- 1 to 3 years of University ___
- 4 or more years of University ___

II. Relationship with the VO-AG school

1. To what extent do you know ...?

	Very well	Some what	Little	None
Director				
Sub-Director				
One Aged Teacher				
Two Aged Teacher				
Three Aged Teacher				
Four Aged Teacher				
Five Aged Teacher				

	Always	Often	Sometimes	Seldom	Never
2. How often do the teacher(s) participate in farmer association meeting?					
3. How often do the teacher(s) par- in community problem-solving?					
4. How often have you been involved in school-farm production projects?					
5. How often have you been involved in discussing the teacher determine what to teach in his school?					
6. How often have you been invited to visit the school-farm projects?					
7. How often have you been invited to participate in school-short courses?					
8. How often have you attended such invitations?					

III. How do you feel about services and programs associated with rural development in your community? (Please check)

	A severe problem	A moderate problem	A small problem	Not a problem
FARM PRODUCTION AND MARKETING				
1. Opportunity to learn about improved farming methods.				
2. Ability of extension workers to explain new or improved farming methods.				
3. Usefulness of information provided by extension workers to small farmers.				
4. Farming productivity.				
5. Prices received for farm products.				
6. Cost of materials for farming operation.				
7. Resources available for production and marketing.				
A. Credits				
B. Land				
C. Markets				
D. Roads				
E. Storage				
F. Seed				
G. Fertilizer				
H. Other (write in ...)				
8. Farmer cooperative association.				
A. Organization				
B. Management				
C. Tecnical assistance				
D. Financing				

FAMILY LIFE

	A severe problem	A moderate problem	A small problem	Not a problem
9. Opportunity for children to receive education.				
10. Adequate health service.				
11. Adequate family planning.				
12. Sanitation:				
A. Black-water				
B. Latrine (Bathroom)				
13. Clear, safe, adequate drinking water.				
14. Wholesome entertainment for the family:				
A. Sports				
B. Television				
C. Radio				
D. Meeting place				
E. Other (write in ...)				

Stillwater, 22-10-80

CIUDADANO:

_____

_____

_____

La siguiente tiene por finalidad solicitar su valiosa colaboración en la aplicación de unas encuestas, cuyo objetivo es conocer las percepciones de directivos, profesores y productores agrícolas sobre aspectos relacionados con las escuelas de agropecuaria a nivel medio y el desarrollo de la comunidad rural.

Los resultados de estas encuestas serán usados para la culminación de un proyecto que presentaré como tésis de grado del Master en Ciencias en la Mención de Educación Agrícola que estoy realizando en la Universidad del Estado de Oklahoma (Oklahoma State University). El título de dicha tésis es: Possible Adaptations in the Functions of Secondary Agricultural Education to Enhance Rural Development in Venezuela.

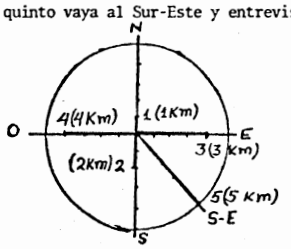
De la colaboración que usted pueda prestarme depende en gran parte la culminación satisfactoria de mis estudios.

Las encuestas de los directivos y profesores deben ser llenadas por el director, sub-director y la mitad de los profesores de la especialidad agropecuaria, incluyendo todas las menciones y tipos que en la escuela existan (Menciones: Fitotecnia, Zootecnia, Mecanización Agrícola, Tecnología Pesquera, Tecnología de Alimentos y Demostradoras del Hogar; Tipos: Régimen Anual, Régimen Semestre Crédito y Ciclo de Formación Básica Agropecuaria.)

Para las encuestas de 5 productores agrícolas use el siguiente sistema: A) Cuando la escuela no está situada en el área urbana, tómela como el centro de un círculo con un radio de 5 Kms. B) Cuando la escuela está localizada en el área urbana, tome la finca de la misma como centro de dicho círculo, luego proceda de la siguiente manera:

1. Para localizar el primer productor vaya directamente al Norte y entreviste al productor que viva a 1 Km. de la escuela, o de la finca de la escuela.
2. Para el segundo vaya al Sur y entreviste al que vive a 2 Kms.
3. Para el tercero vaya al Este y entreviste al que vive a 3 Kms.
4. Para el cuarto vaya al Oeste y entreviste al que vive a 4 Kms.
5. Para el quinto vaya al Sur-Este y entreviste al que vive a 5 Kms.

EJEMPLO:



* Escuela o Finca Escolar

Dichas encuestas podrían ser aplicadas a través de una comisión de alumnos o profesores.

Finalmente al ser aplicadas estas encuestas, agradézcoles me las envíe a mi dirección en Venezuela, si es posible antes del 10 de Diciembre.

Calle 27 entre 39 y 40 No. 39-71; C.P. 3302; Acarigua, Estado Portuguesa

Reiterándole las más expresivas gracias quedo de usted,

Muy atentamente,

Pedro F. Lacruz

PERCEPCIONES DE DIRECTIVOS Y PROFESORES SOBRE ASPECTOS RELACIONADOS CON LAS ESCUELAS DE AGROPECUARIA A NIVEL MEDIO Y EL DESAROLLO DE LA COMUNIDAD RURAL EN VENEZUELA

INFORMACION GENERAL DE LA ESCUELA:

NOMBRE: _____

DISTRITO: _____ ESTADO: _____

MENCIONES: _____

I. Cargo y años de experiencia.

	POSICION ACTUAL (MARQUE CON UNA (X))	OTRA POSICION (MARQUE CON UNA (X))	TOTAL DE ANOS TRABAJANDO EN ESTA ESCUELA	TOTAL DE ANOS TRABAJANDO EN EL M. DE E.
DIRECTOR				
SUBDIRECTOR				
COORDINADOR GENERAL				
PROFESOR P.A.P.				
PROFESOR POR HORAS				
		TOTAL:		

NOTA: Si ud. es docente especifique el (los) curso(s) que está enseñando: _____

II. Considerando cada uno de los aspectos indicados abajo exprese su satisfacción marcando con una (X) su respuesta en la columna correspondiente.

	MUY SATISFECHO	SATISFECHO	DISATISFECHO	MUY DISATISFECHO
1. Su trabajo				
2. Su pago				
3. Relación entre colegas				
4. Presentes condiciones de trabajo				
5. Modo de vivir (vivienda, etc.)				
6. Ubicación geográfica del trabajo				
7. Evaluación hecha sobre el rendimiento en su trabajo				
8. Preparación recibida antes de su empleo				
9. Programa de adiestramiento y actualización				
10. Oportunidades de usar sus propias ideas y/o métodos				
11. Mejoramiento en cuanto a facilidades y recursos audiovisuales				
12. En general, con los programas de el Departamento Nacional de Educación Agropecuaria				

III. Marque con una (X) su respuesta de las siguientes preguntas las cuales reflejan (1) su situación actual y (2) lo que usted desearía.

	SITUACION ACTUAL SI	SITUACION ACTUAL NO	MI DESEO SI	MI DESEO NO
1. ¿Está ud. trabajando en la misma región donde nació?				
2. ¿Está ud. trabajando en la misma profesión en el cual fue graduado ?				
3. ¿Ofrece el M. de E. facilidades para que ud. y su familia puedan vivir cerca de la escuela?				

IV. ¿A cuántos kms desde la escuela está su casa donde está viviendo con su familia? (Marque con una (X) su respuesta)

50 o menos	
51 a 150	
151 a 250	
251 a 350	
351 a 450	
Mas de 451	

V. 1) ¿Con qué frecuencia su rendimiento en el trabajo ha sido sometido a una evaluación formal? (Marque con una (X) su respuesta)

CADA AÑO	
CADA 2 AÑOS	
CADA 3 AÑOS	
CADA 4 AÑOS	
NUNCA	

2) Evaluación formal de su rendimiento envuelve las siguientes personas: (Marque con una (X) las veces que sea necesario)

Personas quienes me están evaluando / Personas quienes yo desearía que me evaluaran		
Supervisor Nacional de Agropecuaria		
Supervisor Estadal		
Director		
Sub Director		
Colega Profesor		
Coordinador General		
Representante de la Comunidad		
Nadie o ninguno		

VI. Relaciones con la comunidad.

Indique con una (x) su respuesta en la columna el cual refleje mas su situación.

	NUNCA	RARA VEZ	ALGUNAS VECES	FRECUENTEMENTE	SIEMPRE
1. ¿Con qué frecuencia participa ud. en reuniones de asociaciones de productores agrícolas de la comunidad?					
2. ¿Con qué frecuencia participa ud. con grupos diferentes a los de la escuela en la solución de problemas de la comunidad?					
3. ¿Con qué frecuencia ha envuelto ud. a los agricultores en su programa de enseñanza?					
4. ¿Con qué frecuencia ha envuelto ud. agricultores en sus proyectos agrícolas de la escuela?					
5. ¿Con qué frecuencia ha ud. invitado a los productores a visitar los proyectos de la finca escolar?					
6. ¿Con qué frecuencia visita ud. a los líderes de la comunidad?					

VII. ¿A qué grado estas áreas de problemas asociados con agricultura y desarrollo rural existen en la comunidad donde está situada la escuela ?

	NINGUNO	MINIMO	MODERADO	SEVERO
PRODUCCION Y MERCADEO AGRICOLA				
1. Oportunidad para aprender nuevas técnicas y métodos agrícolas.				
2. Habilidad de los agentes de extensión para explicar nuevas técnicas y métodos agrícolas.				
3. Utilidad de la información provista por los extensionistas a los pequeños agricultores.				
4. Rendimiento de su explotación.				
5. Precios recibidos por los productos agrícolas.				
6. Costos de los materiales e implementos para las operaciones agrícolas.				
7. Recursos disponibles para producción y mercadeo:				
A. Créditos				
B. Tierra				
C. Mercadeo				
D. Vias agrícolas				
E. Almacenamiento				
F. Semillas				
G. Fertilizantes				
H. Otro( )				
8. Asociación de cooperativas agrícolas:				
A. Organización				
B. Administración				
C. Financiamiento				
D. Asistencia técnica				
E. Otro ( )				
VIDA FAMILIAR				
9. Oportunidad para los hijos de los productores de recibir educación.				
10. Adecuado servicio de salud para la familia.(Asistencia médica)				
11. Adecuada información y servicio sobre planificación familiar.				
12. Aspectos sanitarios:				
A. Aguas negras				
B. Letrinas o sanitarios				
13. Agua en calidad y cantidad suficiente.				
14. Saludable entretenimiento para la familia:				
A. Deportes				
B. Televisión				
C. Radio				
D. Lugares para reunion				

VIII. En sus propias palabras, exprese su opinión a cerca del contenido de las siguientes preguntas:

1. Ciertas áreas de agricultura, familia y comunidad (tales como: producción agrícola y asistencia médica) son considerados prioritarias si las áreas rurales y desarrollo de la comunidad están funcionando a un alto nivel. En orden de importancia señale 4 áreas vitales para el desarrollo de su comunidad.

2. ¿Cree ud. que los jóvenes que viven en su comunidad, incluyendo sus hijos, deberían ser incitados a estudiar para:

a) Profesores de educación agrícola

SI ☐ NO ☐

Por qué si o no ?

b) Agentes de Extensión Agrícola

SI ☐ NO ☐

Por qué si o no?

3. Nombre 5 cursos del programa de estudios de las escuelas de agropecuaria que ud. cree están contribuyendo más en el desarrollo agrícola de las comunidades rurales. Diga porqué.

4. Expresse cualquier comentario que ud. desee emitir, relacionado con este cuestionario.

PERCEPCIONES DE PRODUCTORES AGRICOLAS SOBRE ASPECTOS RELACIONADOS CON LAS ESCUELAS DE AGROPECUARIA A NIVEL MEDIO Y EL DESARROLLO DE LA COMUNIDAD RURAL EN VENEZUELA

INFORMACION GENERAL DE LA FINCA

DISTANCIA A LA ESCUELA:_____ CANTIDAD DE HECTAREAS:_____

EXPLOTACION: AGRICULTURA ☐ GANADERIA ☐ MIXTA ☐

I. EDUCACION

1. ¿Cuál es su grado de instrucción? (Indique con una (X) su respuesta)

0 a 3 años de educación primaria	
4 a 6 años de educación primaria	
1 a 3 años de educación media	
4 a 6 años de educación media	
1 a 3 años de Universidad o superior	
4 o más años de Universidad o superior	

II. RELACION CON LA ESCUELA DE AGROPECUARIA

(Indique con una (X) su respuesta)

1. ¿A qué extensión conoce ud a:	NADA	MUY POCO	ALGO	MUY BIEN
Director				
Subdirector				
Un Profesor de Agropecuaria				
Dos Profesores de Agropecuaria				
Tres Profesores de Agropecuaria				
Cuatro Profesores de Agropecuaria				
Cinco Profesores de Agropecuaria				

	NUNCA	RARA VEZ	ALGUNAS VECES	FRECUENTEMENTE	SIEMPRE
2. ¿Con qué frecuencia participan los profesores en reuniones de asociaciones de productores de la comunidad?					
3. ¿Con qué frecuencia participan los profesores en la solución de problemas de la comunidad?					
4. ¿Con qué frecuencia ha participado ud. en los proyectos de producción de la finca de la escuela?					
5. ¿Con qué frecuencia ha participado ud. en la determinación de las actividades y programas de la escuela?					
6. ¿Con qué frecuencia ha sido ud. invitado a visitar los proyectos de la finca de la escuela?					
7. ¿Con qué frecuencia ha sido ud. invitado por la escuela a participar en cursos cortos?					
8. ¿Con qué frecuencia ha atentido ud. dichas invitaciones?					

III. ¿Cuál es su apreciación acerca del funcionamiento de los servicios existentes en su comunidad relacionados con agricultura y desarrollo rural?

(Indique con una (X) su respuesta)

	NO ES PROBLEMA	EL PROBLEMA ES MINIMO	EL PROBLEMA ES MODERADO	EL PROBLEMA ES SEVERO
PRODUCCION Y MERCADEO AGRICOLA				
1. Oportunidad para aprender nuevas técnicas y métodos agrícolas				
2. Habilidad de los agentes de extensión para explicar nuevas técnicas y métodos agrícolas.				
3. Utilidad de la información proveída por los extensionistas a los pequeños productores agrícolas.				
4. Rendimiento de su explotación.				
5. Precios recibidos por los productos agrícolas.				
6. Costos de los materiales e implementos para las operaciones agrícolas.				
7. Recursos disponibles para producción y mercadeo:				
A. Créditos				
B. Tierra				
C. Mercadeo				
D. Vías Agrícolas				
E. Almacenamiento				
F. Semillas				
G. Fertilizantes				
H. Otro(Escríbalo)				
8. Asociación de Cooperativas Agrícolas:				
A. Organización				
B. Administración				
C. Asistencia Técnica				
D. Financiamiento				
E. Otro (Escríbalo)				
VIDA FAMILIAR				
9. Oportunidad para los hijos de los productores de recibir educación.				
10. Asistencia médica para la familia de los productores.				
11. Adecuada información y servicio sobre planificación familiar.				
12. Aspectos sanitarios:				
A. Aguas negras				
B. Letrinas o sanitarios				
13. Agua en calidad y cantidad suficiente				
14. Saludable entretenimiento para la familia:				
A. Deportes				
B. Televisión				
C. Radio				
D. Lugares para reunirse				

APPENDIX B

LETTERS OF CORRESPONDENCE

OKLAHOMA STATE UNIVERSITY • STILLWATER
Department of Agricultural Education 74074
(405) 624-5129

August 25, 1980

Lic. Heriberto Nunez
Supervisor Zone No. 2
Fundacion Gran Mariscal De Ayacucho
3828 Veterans Blvd. Suite 209
Metairie, LA 70002

RE: Study Program and Masters
Thesis Proposal for Pedro F. LaCruz
Student No. 4195870

Dear Licenciado Nunez:

We are very pleased to have responsibility for the advisement of Pedro F. LaCruz as he attempts to complete requirements for the Master of Science Degree in Agricultural Education. We find Mr. LaCruz to be a very capable and conscientious student who is very clear and certain as to objectives for his study program. With the somewhat unusual capability and responsibility exhibited by Mr. LaCruz we feel that he should be encouraged to undertake the writing and defense of an important research effort on certain aspects of rural development as these may be furthered through Agricultural Education. The thesis title will be Possible Adaptations in the Functions of Secondary Agricultural Education to Enhance Rural Development in Venezuela. For several years this department has maintained a strong interest in researching the relationship between effective programs of agricultural education and rural development progress, this in quite a number of countries. We therefore welcome the opportunity to direct Mr. LaCruz in such an endeavor in Venezuela. Therefore, we support his request for the customary allowance which is provided students attempting thesis research and preparation.

We will certainly keep you informed as to progress made by Mr. LaCruz.

Sincerely,

Robert R. Price
Professor and Head, Emeritus

RRP:ssa

Approval:

Robert Terry, Head
Department of Agricultural Education

OKLAHOMA STATE UNIVERSITY • STILLWATER
Department of Agricultural Education 74074
(405) 624-5129

October 14, 1980

Professor Ramón Fugué Acosta
Dirección de Educación Básica Media
y Diversificada
Ministerio de Educación
Caracas, Venezuela

Dear Professor Fugue:

We are so very pleased to have one of your countrymen, Pedro LaCruz as a graduate student at this university. We are encouraging him to undertake a rather ambitious project for his Masters thesis which is to be entitled: Possible Adaptations in the Functions of Secondary Agricultural Education to Enhance Rural Development in Venezuela. For several weeks he has been engaged in the development of a schedule for obtaining information or data needed for the study. We feel that he has now perfected a questionnaire which will amply provide for this need.

We hope that this project is such as to enlist your support and assistance, this through the Department of Agricultural Education.

In our judgement, this effort has great potential for providing assistance in further development of curricula and course content in Vocational Agriculture. We are particularly pleased that a major emphasis is directed toward rural and community development.

If we can furnish additional information, please so inform us.

Sincerely,

Robert R. Price

Robert R. Price
Professor and Head, Emeritus

RRP:ssa

Stillwater, 23/10/80

Ciudadana:
Prof. Carmen Teresa Jimenez
Jefe Departamento de Educación Agropecuaria
Ministerio de Educacion
CARACAS

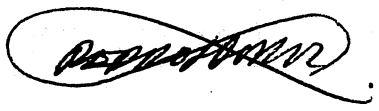
Estimada Profesora Jimenez:

Por medio de la presente le informo de un trabajo de investigación que estoy realizando para presentarlo como tesis de grado, relacionado con las Escuelas de Agropecuaria y el Desarrollo Rural en Venezuela. Al mismo tiempo le remito copia de las encuestas e instrucciones enviadas a lo 40 directores de las Escuelas de Agropecuaria a nivel medio. Con la finalidad de mantenerla informada, deseando encontrar la mayor receptividad posible tanto de su persona como del personal que ud. dirige.

Notifícole que conozco profundamente la aventura y el riesgo de este tipo de investigación donde se depende de la bondad de otras personas; sin embargo aspiro lograr mi objetivo planteado, por ello cualquier aporte que ese Departamento pueda ofrecer para motivar a los directores en la aplicación de estas encuestas estará de mi parte altamente agradecida.

Sin otro particular al cual hacer referencia

Atentamenta,



Pedro F. Lacruz

VITA 2

Pedro Felipe Lacruz

Candidate for the Degree of

Master of Science

Thesis: POSSIBLE ADAPTATIONS IN THE FUNCTION OF SECONDARY AGRICULTURAL EDUCATION TO ENHANCE RURAL AND COMMUNITY DEVELOPMENT IN VENEZUELA

Major Field: Agricultural Education

Biographical:

Personal Data: Born in Biscucuy, Estado Portuguesa, Venezuela, February 23, 1953, the son of Ernesto Lacruz and Carmen Amelia de Lacruz.

Education: Graduated from Escuela Técnica de Agricultura High School, Rubio, Estado Tachira, Venezuela, in July, 1970; received the Profesor de Educación Media in Agricultural Education from the Instituto Universitario Pedagógico Experimental, Barquisimeto, Estado Lara, Venezuela, in July, 1974; completed requirements for the Master of Science degree at Oklahoma State University in July, 1981.

Professional Experience: Four years teaching in Technical Agricultural High School, 1971-1974; Director, (1) Ciclo Diversificado de Agropecuaria "San Luis", 1975-1976, (2) Escuela Técnica Experimental de Agricultura, "Crisanto Lacruz", 1977-1979.

Professional Organization: National Teachers Association in Venezuela.