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MANAGEMENT IN COOPERATIVE FARMING

by

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All views, interpretations, recommendations, and conclusions are those of the author and not necessarily those of supporting or cooperating organizations.

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INTRODUCTION

Management in cooperative farming has a special prominence due to the emergence of this form as a crucial factor in development in Third World countries. While the management functions are, in essence, the same on a production cooperative as they are in any other organization, the actual implementation of the functions pose special problems because of the unique nature of management-worker relationships on cooperative farms. It is to these problems that this study is addressed.

Chapter I discusses the role of agriculture in development, and provides the context against which the case for cooperatives should be placed. Chapter II uses John R. Commons' work on institutional economics, theories of business management, and theories emerging from Yugoslavia's self-management enterprises as a framework for developing an organization theory relevant to cooperative farming enterprises. Chapter III studies in detail the management function and operation in view of cooperative variables and goals. Chapter IV discusses two new forms of cooperative farming in underdeveloped countries--the Chilean Asentamiento and the Tanzanian Ujamaa--with particular stress on organizational aspects. Chapter V offers a model for cooperative farming.

For further elucidation on the topic, chiefly in the form of detailed studies of other forms of cooperative farming (kibbutz, moshav, ejido, kolkhoz), the reader is referred to Boguslaw Galeski, "Prospects for Collective Farming," (a forthcoming LTC Paper), as well as to the author's Ph.D. thesis upon which this Research Paper is based (Claudio Barriga, "Management in Cooperative Farming," Ph.D. thesis, Department of Agricultural Economics and Business, University of Wisconsin-Madison, 1972).

CHAPTER I: AGRICULTURE AND ECONOMIC DEVELOPMENT

At the completion of the first Development Decade (1960-1970), most of the poor nations were not developing as expected. Only 24 out of 156 countries which can be classified as LDCs had a per capita GNP growth rate exceeding 5 percent yearly, the minimum target set for the period. Almost 90 had rates of less than 3 percent per capita (Finance and Development, pp. 48-60).

Isolation and/or ranking of factors influencing poor growth performance is extremely difficult; nevertheless, agriculture occupies an unfortunate pre-eminence, constituting, on an average, about 35 percent of the GDP of developing nations, reaching as high as 60 percent in some cases. In the crucial export sector its importance is even greater, with agriculture contributing more than 40 percent of the value of total exports, while with respect to population and employment, more than 50 percent of the people depend on agriculture for a living.

Among the explanations for a poor agricultural performance are:

- 1) In many countries agriculture is still at subsistence or semi-subsistence levels, with little production surplus to be marketed.

2) For several years, especially from the late 1940s through the 1950s, development was viewed as synonymous with industrialization. In many nations this meant neglecting the agricultural sector. At the same time, agriculture faced an increased demand due to high population growth rates, increasing urbanization and increased incomes in the population due to industrial employment and expansion of trade. While demand increased, supply lagged due to the inherent complexities of agricultural modernization on the one hand and the lack of appropriate policies and necessary resources for agricultural improvement on the other.

3) A third reason is the common rigid institutional framework of many LDCs, with uneven tenure structures (latifundia-minifundia pattern), strong control of marketing channels--both to and from the farmer--often by inefficient and costly intermediaries, and highly selective credit policies geared mainly to large landowners.

4) A final reason has been a fluctuating if not absent government policy whose responses to political pressures seldom provide the stability required for agricultural investment.

All of these reasons resulted in a lagging agricultural sector, forcing countries to use their scarce foreign currency for food imports to meet consumption needs instead of using it for productive investment.

Structural Changes and Agricultural Development

The following issues must be considered in discussing agricultural development:

1) The increasing demand for food: Third World population growth rates of over 3 percent yearly imply a substantial increase in food demand. To maintain present food consumption levels in the LDCs, then, agriculture must grow over 3 percent per year; if adequate nourishment is an objective, agricultural growth rates would have to at least double to 6 percent yearly.

Using the Johnston-Mellor formula that a 1 percent increase in per capita income in a less developed country will produce a 3.7 percent increase in demand for food, the rate at which agriculture would have to grow to meet demand expectations increases even more. Substantial improvements can be made in agriculture with only modest capital requirements, making it a feasible achievement in poor and capital-hungry underdeveloped areas (Southworth and Johnston, p. 9; Johnston and Mellor, pp. 575-581; Papanek, p. 410). Schultz has advocated using new inputs with relatively high payoffs and good distribution, together with appropriate education of farmers, to bring forth agricultural modernization and increase output (Schultz, 1964a and b). The green revolution has shown Schultz was essentially right and that adequate technological changes are capable of making dramatic improvements in food production. There are, however, several problems attached to an indiscriminate use of the green revolution package if deep structural changes are not made simultaneously in the agricultural sector (Ladejinski; Falcon; L. Brown, 1970).

2) Agricultural development and employment: On one hand, modernization of agriculture and the rural sector may create employment opportunities through intensification of crop and livestock production, or through

the creation of ancillary enterprises. On the other hand, as industrialization proceeds and gradually steps up, agriculture can release the labor needed for industrial development, replacing it through mechanization and other technological adjustments. Viewed in the framework of what Owen has called the "expenditure squeeze" on agriculture, this sector can be seen as a regulatory force, keeping workers until alternative employment opportunity in the nonfarm sector opens up.

Given the present characteristics of developing nations, there will have to be a growing reliance on the ability of the agricultural sector to hold labor and provide employment. Using Doving's formulation (Doving, 1959) and some typical data from LDCs, we find that merely to absorb the population increase, job creation would have to grow in the non-farm sector somewhere in the range of 6 to 12 percent yearly,¹ a very difficult achievement indeed. Data from LDCs show that, based on past performances, this is almost impossible to accomplish. Meier (pp. 430-439), using several sources, shows that industrial employment in LDCs has lagged behind growth in industrial output, behind growth of the urban population, and even in some cases behind the general growth rate of population.

Data for Latin America show a growth rate in industrial employment of approximately one-third of the annual urban population increase for the 1950s decade. The situation in Africa is not much better, and there are several cases in which the annual rates of growth in total nonagricultural employment in Africa were actually negative for the period 1955-1964. This lack of job opportunities has created severe unemployment and underemployment (See Thiesenhusen for the case of Latin America).

3) Agriculture and industrialization: In LDCs, an important sector of industry (a larger fraction than in developed countries) is dependent for its operation on agricultural raw materials (food processing, textile, rubber, leather, paper, tobacco and beverage industries). Industrial diversification is also dependent on increasing activity in the agricultural sector. Higher net cash incomes for the rural population would give farmers more purchasing power, thus enlarging the market for industrial products (R. Nurkse, p. 580). The rise in rural production will also result in an expansion in supporting services and activities such as marketing, packaging, supply of inputs and other household goods, etc.

4) Agricultural development and the balance of payments: Higher production can often be transformed into higher exports or a reduction

¹Assuming we want agriculture to remain stable in absolute numbers, and that population and labor force increase at the same rate, then population increases (therefore labor force increases) would have to be absorbed by the nonagricultural sector of the population. If we assume a 3 percent yearly growth rate in total population and a distribution of population of 75 percent in agriculture and 25 percent in nonfarm sector, the growth rate needed in the nonfarm sector to absorb all population would be 12 percent. If the distribution is different, with less agricultural population, the employment growth rate needed in the nonfarm sector will be lower. With 60 percent in agriculture and 40 percent in nonagriculture the required rate is 7.5 percent yearly.

in imports, thus enlarging the availability of foreign currency for other development needs. Different policies will have to be implemented for each agricultural subsector (domestic and export) in order to achieve the required export expansion. In cases where this enclave has not previously existed, it may be necessary to create such a sector (a profitable export crop can frequently be added to an existing cropping system without making too large a capital outlay).

5. Agricultural contributions to capital formation: Measures such as double cropping or cultivating new land by irrigating it with such low-capital techniques as simple pumps, wells or regulatory dams; the use of new or improved seeds, or the adequate use of fertilizer and pesticides can provide agricultural returns ranging from 100 to 400 percent with only a moderate capital outlay. Once output increases, different mechanisms exist through which capital can be extracted from this sector. Heavy taxation was a very successful device in Japan's development; production quotas delivered to state agencies is the system used in the socialist countries; and a deteriorating parity was a mechanism operating in the United States (Dorner, p. 427). Other mechanisms such as rental payment to landowners, the use of farmer savings for industrial expansion, or the maintenance at farm cost of educational institutions are but a few of the ways in which capital can be extracted out of agriculture to finance the development process.

Land Reform and the Green Revolution

The kinds of structural changes needed in the agricultural development process outlined above are well summarized in the United Nations definition of Agrarian Reform:

. . . (it) is the reform of the institutional structures of the agricultural production. It includes, in the first place, the land tenure system, the legal and customary legal regime of property over the land, the distribution of property over agricultural exploitations between big farms and peasant holdings or between peasant holdings of different size; the land tenure system, the system according to which the land is worked and its products are distributed between those who work the land and the landowner; the organization of credit, production and marketing; the system of agricultural financing, the types of taxes that the governments impose over the rural population; and the services that the governments provide to the rural populations, such as technical assistance and training, sanitary services, water supply and communications.²

The issue which concerns us most is the type of organization which is best suited to help achieve short-, medium- and long-term goals. If agricultural output and productivity are expected to improve, an institution is needed which will allow for quick technological change. However,

²Cited in Solon Barraclough and Jacobo Schattan "Technological Policy and Agricultural Development" (LTC Library Mimeo), May 1970.

that is not enough. For what happens if demand is not present to absorb that increase? Economists have long ago shown how price inelastic the demand for food is, which means that a heavy increase in supply will normally result in a sharp decline in prices, making things worse in terms of net return for farmers. This situation is especially harmful when introducing a new technology, because peasants generally working at near-subsistence levels will hardly be able to use new technology unless adequately guided and assisted, especially since this innovation will normally mean a much higher expense in input.³ As substantially better net returns are not quickly forthcoming, the farmer is likely to resist adopting new technology for obvious reasons.

Feder has divided development experts into two groups: "the Technocrats and the Reformers." One approach (technocrats) is based on the belief that the crucial element in rural development is an increase in output and productivity. The use of better inputs, better infrastructure and a more rational price system create favorable conditions which translate into greater outputs and better productivity according to this view, thus setting rural development in motion.

The second approach (reformers) reasons that agricultural development is almost impossible with the present agrarian structure, and that a necessary condition for development is to do away with the present system by means of a "massive, rapid and drastic" land reform, which by changing land ownership will allow the improvement of the peasant sector and thus foster the development process.⁴ These two approaches conform to the two new major policy measures of the last decade dealing with agricultural development--land reform and the green revolution.

The existing land tenure system in LDCs (especially in Latin America) has often been denounced as one of the major causes of agricultural backwardness (L. Brown, 1969; T. Carroll, 1969). Land reform became an "accepted" concept for government officials and politicians in LDCs around the 1960s; so much indeed, that it became a requirement for Latin American countries seeking the assistance of the Alliance for Progress for development programs. However, land reform, while a necessary condition, is not a sufficient condition to ensure agricultural development. Often, during the early years of the process production may fall to levels much lower than those which gave impetus to land reform originally.

While land reform was debated and implemented with greater or less depth and success in different countries, other ways to encourage agricultural development were proposed. Schultz advocated new inputs with

³Wharton stated that a Filipino farmer adopting the new rice varieties will increase his cash cost--due to all inputs required--from \$20 per hectare to \$220 per hectare. See Wharton, p. 92.

⁴This position is mainly based in the agrarian structure of Latin America dominated by a latifundio-minifundio pattern. (See Feder.)

relatively high payoff and good distribution to farmers, together with appropriate education on the ways to use these inputs to bring about modernization of agriculture which would then increase output (T. Schultz, 1964a, p. 199).

Agricultural research conducted mainly by the Rockefeller and Ford Foundations in the international agricultural centers in Mexico and the Philippines produced a package of new technology--consisting mainly of improved varieties, fertilizers and pesticides--which when used on a large scale, produced such an impact on the 1967-68 crops of countries like Mexico, India, Pakistan and the Philippines, that the concept of the green revolution was born. The splendid achievements of this program showed--for many--an alternative way to achieve dramatic increases in agricultural output rapidly instead of through the painful and often slow processes associated with structural change and land reform programs. However, technological change, on the other hand, while allowing substantial output increases, will not fulfill other goals which are expected from agricultural development, and may create severe political tensions. There is no doubt that the use of these policy measures, as alternative or complementary, will depend to a great extent on the definition of development, land reform and green revolution, and how each of these relate to the specific characteristics of the country or region where they are to be applied. Many have indicated that the green revolution should be just one of the steps--maybe the initial one--towards agricultural development. In any case, a remarkable similarity exists between the two policies if some of the side effects or complementary measures are taken into consideration. Increases in output will make institutional adjustments necessary in the areas of credit, marketing, education, storage, processing, etc. (Falcon; Wharton, 1969b; Paup; L. Brown, 1968). Land reform appears to be a basic measure to assure the wide distribution of the benefits of the green revolution, which can then be implemented almost simultaneously, taking advantage of courses of action made possible by structural transformations. In agricultural development today there are two major issues, identified by Lester Brown as the food-population and the employment-population problems. These two issues, as they relate to Latin America, will illustrate the degree of competition or complementarity between land reform and the green revolution.

Latin America faces one of the highest rates of population growth in the world. For the period 1965-1969 the average rate was 2.9 percent, varying from 1.2 percent in Uruguay to 3.4 percent in Mexico. Agricultural output for the period 1950-1965 grew, on average, at 3.8 percent annually (Prebisch, 1970). Redundant labor also remains in the agricultural sector due to a lack of working opportunities.

These conditions imply that the food shortage problem cannot be divorced from the employment problem. Although it has been pointed out by many that the green revolution can make an important contribution to wider employment possibilities due to more intense cropping and the creation of ancillary industries needed to provide the required new inputs and higher technology, it is no less true that this success story can lead--through indiscriminate labor saving mechanization--to higher unemployment. Land reform measures, on the other hand, by providing a wider distribution of land resources among the rural population, create work. If, as the tenure system is reorganized, the package of new technology is made available to the peasants, large increases in production can be obtained so as to reduce the food-population problem.

Organization of Production for Agricultural Development

These different issues show that the organizational pattern of the producing unit is a crucial element in the process of agricultural development resulting in either failure or success in meeting development goals. Production units range from the private, individual farm system that constitutes the backbone of the United States' impressive record of output and productivity to the State-owned and operated farms and collectives typical of socialist economies, with a host of intermediate forms. Agricultural development programs in LDCs have traditionally tended to identify with one of these two systems, based generally on their international political position. However, the need for new, original forms of organization has been pointed out by economists who denounced attempts at organizational transplantation and called for specially-oriented agricultural research (Millikan and Hapgood, 1967). A widespread belief among social scientists working in rural development is that only cooperative production can cope with the goals set forth for agricultural development (increased output, employment and income redistribution). The problem to be confronted in this case is one of management and the effects of such a scheme on productivity. The lack of incentives in traditional forms of collective exploitation has often been denounced, and if it is not remedied in LDCs, the possibilities for increasing output appear dim. A cooperative farm would have many facets, depending on the structure from which it originates: it will have to provide services previously provided by the landlord (if the organization arises from a land reform process); it will have to convince farmers to transfer their individual decision-making to the cooperative (if it is a regrouping of minifundistas); and, in any case, it will have to achieve good management to reach the objectives planned. This will demand good coordination, mutual trust, adequate and efficient planning and implementation of the work load and wise financial management--which will depend primarily on production achievements--to provide members with the funds they require for their operation and maintenance, and a final year net return better than that of previous periods.

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CHAPTER II: THEORIES OF ORGANIZATION AND THEIR RELEVANCE TO COOPERATIVE FARMING

Three bodies of theory will be used in this chapter to look at cooperative farming: the work of John R. Commons on institutional economics, the theories commonly used for the analysis of business organizations, and some of the theories emerging out of the workers' management system of organization used in Yugoslavia since 1950.

Institutional Framework

John R. Commons' work in the early decades of the 20th century stems from a period dominated by the emerging entrepreneurial corporation. Commons' concern was how to bring the constitutional democracy of the United States into economic relationships. The issue at that time was the need to protect workers from the arbitrariness of management. Collective action was seen by Commons as the way to balance the interests of management and labor which would, however, remain opposing forces. This conflict of interests was due in part to classical management theory regarding the concepts of power and authority. Authority was defined as the right and the power to expect performance from others. Authority and power were simultaneous and were vested in management. Authority had a downward flow, from management to workers, who had to comply with what was expected of them.

The institutionalization of these concepts contributed to principles of scientific management worked out by Frederick Taylor which were in essence a modern interpretation of the principles of division of labor first outlined by Adam Smith. Methods of scientific management included: 1) the establishment of performance standards through research and experimentation; 2) the planning of work by management; 3) the training of workers to meet standards; and 4) the maintenance of the performance standards according to task objectives under proper supervision (J. F. Mee, p. 42). The wide use of this methodology allowed substantial increases in productivity and placed strong pressures on labor for improved performance to meet management-set standards. Resentment by labor to some of management's demands gradually led to organization and expansion of the union movement.

Commons, in his theory of institutional economics, analyses relationships between management and labor through the mechanism of "transactions," which he defines as the rules of order through which society controls ownership of and access to the forces of nature. "Transactions," he writes, "are not the 'exchange of commodities,' in the physical sense of 'delivery,' they are the alienation and acquisition, between individuals, of the rights of future ownership of physical things, as determined by the collective working rules of society" (Commons, 1934, p. 58). To transfer these rights, Commons states, there will have to be negotiation between the parties concerned according to the working rules of society. He recognizes three types of transactions: bargaining, managerial and rationing, which are "functionally interdependent and together constitute the whole which we name a going concern" (Commons, 1934, p. 58).

Commons also recognizes that negotiation in bargaining transactions will be influenced by persuasion or coercion, depending on opportunity, competition and bargaining power. Negotiations occur only between legally (though not necessarily economically) equal parties. These parties may be

economically unequal (giving rise to coercion) or economically equal which results in negotiation through persuasion. This last point is especially relevant for cooperative farming, with its interrelationship among equals in management and labor which emphasizes the role of persuasion and leadership to attain performance goals.

Commons recognized that managerial transactions had come to involve a certain amount of negotiation. "This inclusion of negotiation," he writes, "arises mainly from the modern freedom of labor, with its liberty of the laborer to quit without giving a reason" (Commons, 1934, p. 61).

Chester Barnard, in his book The Functions of the Executive (1938), stated that authority comes from acceptance by individuals of orders or commands. Thus, authority in his view flowed upward, from workers to management. Management and labor continue to be distinct forces with different interests, but now management will have authority only to the extent that is provided by worker acceptance. Power, defined "as the maximum ability of a person or a group to influence individuals or groups" remains in the hands of management, which can exercise this power by means of the economic mechanisms it controls. Influence in turn is defined as "the degree of change in individuals or groups" (Filley and House, 1969, p. 55). In other words, how much can one make others change.

These concepts contribute to determine the way in which management will undertake the functions of the enterprise, especially as they relate to labor.

The third body of theory relevant to the institutional framework within which a cooperative farming enterprise operates flows out of the workers' management system. Under this system distinct forces with different interests cease to exist. Instead, management becomes an extension of workers' control over their interests, which are also those of the enterprise. In a labor-managed enterprise, (a model cooperative farming system) management is a collective right exercised through the various organs elected by the general assembly of worker-owners according to the working rules of the organization. It is collective action that prevails, and Commons' 'rationing transactions'--"an agreement among several participants who have authority to apportion the benefits and burdens to members of a joint enterprise" (Commons, 1934, p. 67)--become relevant. Authority, under this system, "may be considered to be legitimate power; that is, power which is generally acceptable to members of an organization and which is within the values and purposes of the institution" (Filley and House, p. 55). "Institution," in turn, can be defined as "collective action in control of individual action" (Commons, 1934, p. 59).

Cooperative farming, then, as an institution, can be distinguished from a common going concern or business enterprise by the interrelationship existing between authority, power and influence and by relative importance given to bargaining, managerial and rationing transactions as compared to the common going concern.

In cooperative farming, power will be vested in the membership; authority (legitimate power) will be vested in management, but "it is not viewed in terms of rights of command; rather it is explained in terms of /the/ individual's willingness to accept direction from another" (Filley and House, p. 58). Workers (member-owners) grant the authority to management, sanctioning it by their consent to be governed, and the influence of

management on members will be conditioned by the perception membership has of the importance of management's contribution to the success of the enterprise. This perception, in turn, will be conditioned by the ability and leadership style of management. Collective or group action is not something that works by itself automatically, instead, it requires considerable effort and work by all individuals in the group if it is to succeed (Olson).

Organizational Variables in Collective Action

Once the institutional framework within which cooperative farming will operate has been defined, some of the variables which allow the system to operate successfully must be analyzed according to organizational theory. Although a large part of organizational theory is based on industrial research, its validity as a tool of analysis for complex organizations makes it valuable for considering cooperative farming enterprise.

1. Motivation

Motivation has been recognized by many social scientists as one of the basic variables in organizational performance (Vroom and Deci). Three major kinds of motivation are commonly recognized. Paternalistic motivation is geared mainly to worker satisfaction, assuming that the more needs that are satisfied by the job, the greater the response of the workers. Membership in the organization, without any clear relation to performance or behavior is the main source of reward. Several management practices are oriented to providing security to members, such as education, retirement plans, recreation, insurance, housing, etc. Research evidence shows that policies of this type, while improving security and decreasing turnover rates of personnel, have had no direct effects on worker productivity and performance on their jobs.

A second approach to motivation derives from Taylor's work on scientific management. The basic assumption is that a person will be motivated to work if rewards and penalties are tied directly to his performance. Wage incentives, piece rate work and penalties, if work falls below management set standards, are commonly part of the system. Work is organized in such a way that the worker has no participation in it; he is programmed to carry out a certain task. McGregor, in an article which has become a classic in management studies, called this conception of management's task, Theory X.¹ It basically assumes that people are passive, and even resistant, to organizational needs. In addition, they have an inherent dislike for work and try to avoid responsibility. Therefore, most people must be coerced, controlled, directed and made aware of the punishments that exist to make them put forth the necessary effort toward the achievement of organizational goals. Motivation, then, will be based on punishment and externally controlled rewards. Although this approach--reward-punishment--

¹McGregor first presented his ideas about Theory X and Theory Y in 1957, in a paper presented to the Fifth Anniversary Convocation of the School of Industrial Management, MIT, Massachusetts (Vroom and Deci, p. 306) and later expanded them in the book The Human Side of Enterprise, published in 1960.

has been widely used in industry, several limitations to it have been recognized. One stems from the difficulty of measuring performance, especially as one moves up the organizational hierarchy. Another limitation arises from the kinds of penalties and rewards which can be utilized; behavioral scientists have noted that needs are greatly varied and change through time and according to circumstances.² Meeting these needs will not always be possible for the enterprise.

A third approach to motivation, and the one most relevant for a cooperative farming institution, is what has come to be known as participative management. The basic assumption of this approach is that individuals can acquire satisfaction by being effective in their jobs, hence satisfaction will provide the motivation for good performance. It is part of what McGregor called Theory Y, some of its assumptions being: people are responsible (rather than passive) by nature and like to exercise responsibility; work is a natural activity which depends on controllable conditions to generate satisfaction or distress; and, organizational objectives can be used by people as a means to achieve their own personal objectives. This approach has sometimes been called the "soft" management approach in contrast to the "hard" approach described above. Other elements in this system are the integration of planning and actual work performance, involvement of workers in job description, and the equalization of power, with reliance on leadership and guidance rather than authority. Incentives are built into the task itself rather than remaining an outside mechanism. Effective performance as such is the goal, rather than an intermediate means to achieve ultimate goals.

There are aspects where integration of the two systems (scientific and participative management) may be highly beneficial for the overall enterprise; for example, the use of wage increases as rewards for performance within the philosophy of involvement and commitment to the organization. In general, the behavioral approach to motivation should be adopted. Some caution must be advised, however,³ if the members of the production cooperative have been operating under an alternative system for a long time. Integration of the practices of scientific and participative management, moving gradually to increase the latter and decrease the former, may be the most advisable plan.

2. Groups

In cooperative farming, groups gain a special dimension because they are not only used for working activities, but also in all other forms necessary for the development of the rural society. The Hawthorne Studies

²A. H. Maslow, a theoretical psychologist, is known as the father of the need hierarchy concept which states that people at work are motivated by the desire to satisfy a wide range of needs (Physiological, Safety, Social, Ego, Self-fulfillment). Money will only satisfy a few of them, so it is not a primary motivator as suggested by F. W. Taylor. The work initiated by Maslow has been expanded and integrated into the work of several other behavioral scientists, R. Likert, D. McGregor, R. Blake and J. Mouton, and D. Katz, among others.

³James Lee, in a well-elaborated article significantly called "Behavioral theory vs. reality," presents several of the common criticisms

conducted between 1927 and 1932 (which originated the neo-classical theory of human relations) called attention to the importance of groups in working and performance and was followed by further research on groups. Several propositions have come out of that work.

Two basic distinctions must be made when talking of groups. One is the difference between a group and collection of individuals. A group--a collection of two or more people--may be recognized as such when the following characteristics are present: a) group consciousness; b) a perceived common purpose; c) interdependence for the satisfaction of needs and goals; d) interaction in communications; e) the ability to act as a single organism.⁴

The second distinction is between formal and informal groups. Informal groups can be effective to both support or subvert organizational goals (Tannenbaum, p. 225); they must be carefully handled to avoid situations which might impair the organization.

Several other elements are important because of their influence on group performance and effectiveness. Group size has a great impact on several other variables. Research has found that group cohesiveness and group size are negatively related.⁵ This conclusion, empirically tested in industry by several authors, may not always hold in cooperative farming. In industry, where work teams develop and remain permanently for long periods of time, probably a higher cohesiveness will be found than in agriculture, but only for small size groups usually not larger than 10 persons. If the total group is larger, say 40 to 50 people, group cohesiveness may be better in agriculture due to work rotation, something which normally does not take place in industry due to high labor specialization. In addition, agriculture may also be more favorable than industry for cohesiveness in large groups due to greater social interaction.

Participation will foster cohesiveness, but large groups make participation more difficult. Since in cooperative farming participation and involvement are important goals, it will be part of management's task to take measures to allow broad participation. Lower member satisfaction caused by

made to participative management and which have meant a low adoption of the system by the majority of U.S. business organizations. He also mentions the two worlds of business and academia which are so different and which often make academic elaborated theories impractical (see J. Lee, in references).

⁴ There is a substantial amount of material dealing with groups. Some literature which may be consulted for further information and which is listed in detail in the references is the following: Knowles, Whyte, March and Simon; Filley and House in their book also cite Hare, Gibb and Marriot in their chapter, "Span of Control and Size of Work Group."

⁵ Several authors are cited by Filley and House on p. 289 to support this. Among them are Hare and N. Miller. Other authors state this point indirectly. Group cohesiveness, it is said, increases the more frequent interactions are. The larger the group size the fewer interactions will be, from where we can deduce that larger groups, due to the lower interaction among members, will have a lower cohesiveness (Litterer, March and Simon).

lower participation will gradually alienate less articulate members and place the organization in jeopardy.

Group size and performance have two aspects. On the one hand, a larger group may have better performance because of its ability to solve a wider range of problems, due to the greater number of skills which may be found in members. On the other hand, larger groups will take longer to organize and coordinate and will have, therefore, lower productivity.

Development of group norms will be important because of their influence on productivity and performance. Special attention must be given by management to the way in which these are elaborated, trying to influence them to conform to the goals and standards of the organizations. (See Knowles.)

A basic need for the successful implementation of any group activity is the existence of group harmony. The problem is precisely how to achieve that harmony. On the other hand, harmony must not be confused with passiveness. While a harmonious group is desired, a passive one certainly is not. Harmony is something which must be aimed at. It will not come instantaneously, or after cohesiveness or a good mechanism for decision-making has been achieved. Harmony will be that and much more. It will be involvement and participation; in other words, it will be total commitment of all members. Conflict and discussion may still arise, but once harmony is reached the successful survival of the organization is assured.

3. Leadership

The importance of leadership for successful accomplishments has been recognized by social scientists for many years, but its systematic and scientific study was initiated only in this century.

In his work on Institutional Economics, Commons viewed leadership as the element or mechanism through which sanctions were applied to gain control of the going concern, which is distinguished by "its capacity to continue with changing personalities and changing principles, not depending upon any particular person or any particular principle" (Commons, 1934, p. 750). He recognized three types of leadership--leader, boss and chief--according to which sanctions predominated. (Sanctions were defined "as the collective inducements that require individuals to conform their behavior to that of others" (Commons, 1934, p. 700).) A leader depended "solely on persuasion and propaganda to attract and lead his followers." The boss "depends on coercion through control of the jobs, contracts, livelihood or profit of the followers." The chief "depends upon duress through his control of physical force" (Commons, 1934, p. 749). Three additional terms were used by Commons to distinguish different combinations of sanctions through which leadership was attained. One of them was personality, which may be related to what was later known as trait theory of leadership. A second element was principle, which may be related to instrumental leadership because "the leader becomes such, because he can formulate in language what others feel but could not tell" (p. 750). The third and last term, organization, is more associated with the institution itself rather than with any one person or individual. It represents what could be called collective leadership. Two important conclusions are relevant here in terms of our study. The first is that an important task for the leader in newly created systems of cooperative farming is to be able to transform these organizations into "going concerns." The second one is that the leader must choose a system of sanctions to make guidance (rather than control) of the

cooperative enterprise successful.

The creation of the human relations school of management and the writings of Mayo and Lewin aroused a new interest in the role of leadership. (See Etzioni.)

Leadership has been defined "as a process whereby one person exerts social influence over others" (Filley and House, p. 391). It is a relationship of dependence. Part of the leader's success will depend on his ability to perceive the degree of influence he is able to exercise. In cooperative farming due to the relationship existing between power, authority and influence, leadership will be conditioned by acceptance of the followership.

Three major bodies of leadership theory have been recognized and studied extensively: a) trait theory, b) behavioral theory, and c) situational theory.

a) Trait theory is based on special, identifiable characteristics in the personality of the leader which make him successfully accepted as such. It is probably the least relevant to the kind of institution under discussion.

b) Behavioral theorists have identified four types of leadership: autocratic; supportive (participative or democratic); instrumental; and "great man" (Filley and House, p. 393). (1) Autocratic leaders are clearly identified with Commons' concepts of boss or chief whose actions are supported by reward and punishment sanctions. (2) Supportive leaders involve members in the decision-making process and, in general, try to create an appropriate environment for workers' performance. This theory may be associated with McGregor's Theory Y and Commons' concept of a leader acting through persuasion. (3) The instrumental leader will be the pragmatic, organized, methodical man who performs management functions (plan, organize, direct, coordinate and control) to accomplish organizational goals. (4) The "great man" theory of leadership represents the integration in one leader of both the supportive and instrumental theory characteristics.

The "great man" leader is no doubt the most desirable for cooperative farms, however the scarcity of "great men" leads one to select supportive leadership as most suitable to the accomplishment of cooperative farming goals.

c) The situational theory of leadership is probably the most flexible current theory. It is not attached to a specific or unique leadership pattern; instead, it uses the one deemed most appropriate to the situation at hand. (Mockler.) Situational leadership is successful in cooperative farming because of its flexibility, always remaining within the correct perspective of the cooperative farming model. In other words, the sustained use of a leadership style such as autocratic leadership which conflicts with the philosophy and goals of cooperative farming must be avoided.

In addition to these types, a distinction between formal and informal leadership must be mentioned. The formal leader's power derives both from his personality and his organizational position; the informal leader's power to influence others is mainly personal. Thus the basic difference between the two is primarily in their source of power or influence. Another difference is their acceptance by the group; the informal leader is almost immediately and automatically accepted while the formal leader has to work

to gain that acceptance. (See Litterer.) Very often, informal leaders will arise due to the inability of the formal leader to satisfy the wide spectrum of interests and needs of the membership. In cooperative farming, especially in newly created systems, the comprehension of the potential represented by the informal leaders is highly significant. In emerging systems, where the manager usually will have to be an outsider, group acceptance will be problematic; management should therefore try to acquire the collaboration and involvement of informal leaders.⁶

It is important to recognize the growing importance of leadership in the body of organization theory. Management in cooperative farming, therefore, should give special relevance to leadership and work for its development.

Self-Management

One of the major merits of the Yugoslav workers' management system, and one of the reasons for its incorporation here, lies in the fact that it represents the wise use of several behavioral theories and propositions to create a new system of business organization which cannot be branded utopian nor experimental after 20 years of performance.

The system of workers' management, or self-management, emerged from Yugoslavia in 1950 following the break with the Soviet bloc in 1948 and a thorough evaluation of the accomplishments of the Socialist Republic since the end of World War II. As with other systems of organization, its main experience has been in the industrial sector (where it has yielded impressive results). Its general principles and some characteristics represent a model of great relevance for the system of cooperative farming. Self-management represents a more advanced form than that advocated by behavioral theorists, so it is possible to find in it the fulfillment of many of the suggestions coming out of behavioral research on leadership, motivation and group action and performance. The main characteristics of the system could be outlined as follows:

1) Self-management is based on the active participation in management by all the workers according to principles of equality and democracy (i.e., one man, one vote).

2) All the participants in a self-managed enterprise share the net income (or sustain the net loss) of the firm after all operating costs have been deducted.

3) Ownership in a sense ceases to be. The means of production are socially owned, belonging neither to capitalists nor to the state. The

⁶The author's experience with the asentamientos in Chile provides many interesting examples of this need for collaboration. In one asentamiento near Melipilla, in the Santiago province, there were several informal leaders that had risen through union work before CORA took over the farm. The exclusion of some of them from the management process (they maintained the union should manage the asentamiento) created constant problems for the operation of the enterprise. Once they accepted that a specially elected management board was really the one which should manage it, and they participated in the election gaining several positions in the board, most of the problems ended.

workers have the usufruct of the socially owned means of production with specific responsibilities, especially to maintain the value of the means of production.

4) Self-management operates in a market economy, decentralized in its decision-making, although adjusting itself to some government guidelines of planning and control.

5) There is complete autonomy for the enterprise in shaping its management and internal organization, providing the basis of power is maintained in the working community which sanctions the authority of the elected management through workers' councils and other committees.

6) A final characteristic of the workers' management system is complete labor mobility (although there are clear regulations with respect to the dismissal of worker members).

Given these characteristics, variables for organizational performance will now be examined. The goals of the enterprise are basic. A very concrete one is the maximization of the members' income. A second, more general one to which the previous one is an important contribution is the maximization of members' satisfaction, necessitating broad organizational goals able to satisfy individual goals.

Probably the basic variable in worker satisfaction is motivation. Vanek, in his analysis of the Yugoslav system, distinguishes between genuine and imposed motivation defined as follows: "By genuine, I understand motivation which emanates from the natural inclinations and desires of an individual in a given environment; by contrast, an imposed motivation is one based on an instruction from an external controlling agent" (Vanek, 1971, p. 17). While imposed motivation exists in any employment situation, genuine motivation is difficult to achieve. In a labor-managed economy, Vanek asserts, "genuine motivation becomes the necessary rule for all of the working population, a situation inconceivable in any other industrial society" (Vanek, 1971, p. 17). Thus the unique relationship of the workers to the cooperative enterprise fosters their involvement and active participation, improving their motivation considerably. Mechanisms such as the election of the Workers' Council, various committees and the management board (elected by the Workers' Council from among its members) all have a grass-roots base. Regulations determining the composition of the board (at least three-fourths of the board members must be production workers) assures broad representation. The prohibition from serving on the management board for more than two consecutive years guarantees the rotation of members in directive positions. These regulations and procedures perform an educational function which permits the emergence and training of new leaders, and improved levels of motivation and performance. Increases in productivity and growth in per capita incomes in Yugoslavia since the establishment of the system clearly support this proposition (Vanek, 1971, p. 21-50). In Yugoslavia, after more than 20 years of the system's operation, the recognition by workers of the importance of effective formal leadership in the person of the director has a solid foundation. A Yugoslav social scientist (Kanusic) has stated that in many cases where there is a dilemma between more direct member participation in management or greater economic

efficiency,⁷ more than two-thirds of the workers consulted in a survey regarding enterprise organization responded that they "ascribe the most important role in the business policy and development of the enterprise to the leading personnel," only a little more than one-fifth assigned this role "to the representative organs of the working community" (Kamusic, p. 100). A further confirmation of the recognition of the need for good management comes from a comparative study--1962 and 1967--made in Slovenia where a strong shift occurred among workers in the importance assigned to the manager. (Also cited in Kamusic.)

This review of some of the important points which affect complex organizations, and the research and theories that have dealt with them, provides us with the necessary background to move into the analysis of the functions of the enterprise and a later construction of a cooperative farming model which can serve as a guideline for similar enterprises which need to be created in developing nations.

⁷This conflict seems to be confirmed by inquiries made in the cooperative movement of Western Europe which has established that business efficiency in cooperatives is "in inverse proportion to the degree of direct participation of their members in management" (Decroches, p. 97). It must be recalled, however, that these are not production cooperatives, which, as we have seen, have a different degree of member involvement than the traditional forms of cooperation.

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CHAPTER III: FUNCTIONS OF THE COOPERATIVE FARMING ENTERPRISE

The creation and organization of a cooperative farming enterprise in most developing nations represents a new venture giving special importance to a systematic analysis and evaluation of other material experiences, although, of course, each cooperative is unique due to the different relative importance of many variables. Some of these variables will be discussed below.

Variables and Goals

An organization has been defined as "a set of planned activities and interrelationships logically drawn up to accomplish a specific objective or objectives." (Litterer, 1965, p. 10.) The way, then, in which an organization functions is closely related to its goals. Once the goals have been established, the organizational framework and the necessary working rules are set up. Certain variables inevitably affect goals and vice versa.

a) Size of the Enterprise

Size depends on the characteristics of agriculture in the area--irrigated or dry, monoculture or multicrop farming, crop or livestock, pre-existing tenure structure, educational level of the peasant members, their farming expertise and working capital.

Production cooperatives normally are created to change an inefficient tenure structure thus improving conditions for the participants, and easing population pressures. Given the social structure characteristic of the production cooperative, it is desirable to have a homogeneous membership and an adequate size group.¹ Organizational theory has emphasized how important group cohesiveness and a sense of belonging is for enterprise performance. These two things, plus the development of a strong cooperative spirit, may best be achieved in a medium sized group. While generally in agricultural enterprises the size of the operation is determined by the land component, in cooperative farming the number of families becomes a better yardstick. A membership of 50 to 100 families has been recommended (Schiller, 1969, p. 35).

In Chile, where the author worked for the Land Reform Agency (1965-

¹Homogeneity may be seen from different points of view. It may be race and cultural background. Weitz, for example, points out the importance of this type of homogeneity, recalling the impossibility of integrating into one settlement migrating Jews who had come to Israel from the Orient, northern Africa and Europe (Weitz, 1971, p. x). Another type of homogeneity will be in terms of previous occupation and agricultural expertise. In Chile, for example, some expropriated farms had among their occupants different types of laborers: The wage worker, the sharecropper and the supervisors (capataces). When Asentamientos were organized, the integration of these three groups in the enterprise was extremely difficult, and their relations were a source of continual conflict; so much so, that in later years sharecroppers and supervisors often preferred to leave the farms once expropriated than to submit to the working system of the Asentamiento, where they thought they would be discriminated against.

1968), it was found that Asentamientos of 40 to 60 families usually allowed for a better organization and a faster training of peasants in the use of new technology and self-management skills. This number of families was not in itself sufficient to guarantee success, however, and variations in performance were often found to depend on intensiveness of agriculture on the farm, on the group spirit developed prior to the expropriation and creation of the Asentamiento, and on leadership ability and agricultural know-how among the CORA officials and the peasants themselves.

Many of the organizational problems which appeared on the early settlements with more than 100 families were eliminated or minimized the following year when they were divided up into two or three separate Asentamientos which coordinated the use of the existing infrastructure. The Chilean experience also shows that it is relatively easy to divide up larger groups, and difficult to enlarge small groups through mergers. The strong opposition by some peasant organizations to the current government's policy of creating centers of agrarian reform (designed to group several Asentamientos together) appears consistent with this principle.

b) Labor Organization

If increased employment is a recognized objective, measures must be taken to ensure the full participation of the labor force available in the production cooperative. Work by family members can be advantageous for the common enterprise, providing flexibility for more intensive cropping, contributing to a stronger cooperative spirit, and increasing family income.

Employment objectives may be, however, in conflict with income goals for members.² If profits (or net savings, to use cooperative terminology) from the farming operation are expected to contribute to capital formation and to increase member income, careful budgeting, including budgeting of labor costs, is required.

Remuneration has generally been a complex issue, especially in production cooperatives due to the dual role of worker-owners. Management must display special tact to deal adequately with this situation. The normal desire for security, equated with a given minimum guaranteed income, must be weighed against a lack of interest in the enterprise which might arise as a consequence of that security and its system of payments. The institutional framework of the production cooperative will have an important influence on the kind of remuneration mechanism established with the general conditions of the workers in the economy and their involvement in the process of

²This situation may occur when the enterprise, by providing more employment, ends up with no profits, and therefore, no dividends to distribute to members. Family income will be higher for those members who have working age children, regardless of the type, quality and productivity of the members' labor. On the other hand, large families who because of children's ages have only one wage earner, will be receiving lower income even if the member has excellent performance and responsibility. This member's expectation of additional income coming out of dividends has not been met because increased employment has wiped out profits. Employment expansion needs to be carefully planned, evaluated, and achieved through increased production intensiveness. Incentive mechanisms must be introduced to the system of payments to avoid unjust situations which may be detrimental for membership morale.

organization and decision-making all influential in their choice of a payment system.

In essence, there are three basic remuneration alternatives for cooperatives. A first one consists only of wages, leaving profits for capitalization of the enterprise and financing of community services. A second system consists of a basic wage, generally according to local wage levels, plus a share in profits usually paid according to the number of days worked for the enterprise. The third alternative provides the member with an income based solely on profits. During the year advances are made only for the most urgent and basic needs.

The first two alternatives run the risk of bankruptcy if wages are too high and harvests are bad. In addition, high wages, while representing security, do not necessarily improve motivation nor performance because workers may fail to see themselves as decisively contributing to the cooperative's income. Thus labor productivity often remains low. The third alternative, while consistent with workers' dual role as worker-owners, does not provide much security, especially in bad agricultural years. This situation may push farmers to look for more independent or more secure income (like house plots or outside work) which may jeopardize the common enterprise. Another difficulty in this alternative is the just payment according to occupations with differing productivity, individual effort and responsibility.

In general, the remuneration system will depend on the organization of the enterprise, the incentive mechanisms that can be built into it, and the weight given to the factors of production. For example, in the East German LPG III, 80 percent of the profits of the enterprise must be allocated to labor, while in India, where land is scarce, the largest profit is allocated to landowners according to their contribution of land to the cooperative venture (see Appendix for cooperative forms in Germany and India).

Technology also has an important influence on labor organization. If mechanization increases, the opportunities for employment tend to decrease. However, improved technology in directly productive inputs (seeds and fertilizers) together with mechanization and new techniques may intensify the cropping pattern, thus creating more employment.

Conditions regulating the entry or exit of members to or from the organization must also be considered. This factor is closely related to the degree of labor specialization and the impact of labor mobility policies on potential members.

Labor mobility in cooperative farming can affect the size of the enterprise, ownership rights, labor skills available to the enterprise, and group homogeneity. Recruitment policies³ will have to take these variables

³The problem of recruitment will have different aspects if the organization is being created in a developed country or in a LDC. In a LDC with lower rural population and more industrialization, it will be necessary to compete with urban jobs for scarce labor. In LDCs with a traditionally large agricultural population, the recruitment issue will be more one of obtaining people with adequate skills to help boost agricultural development.

into account, especially where specialization is beginning and some of the required skills are lacking.

Labor on cooperatives is organized into brigades and work teams, normally with some degree of specialization and responsibility. A bonus on production may be assigned to the brigade or work team as an incentive. This mechanism, previously banished in socialist countries, is increasingly being used to improve agricultural labor productivity. In addition to these groups, some specialists, such as mechanics, tractor drivers, foremen, etc., will also have to be remunerated according to a system which takes into consideration their skills and responsibility.

c) Capital

Capitalization has all too often been identified with mechanization, which is not only normally labor displacing, but also not as effective as the use of biological capital in many circumstances. There is, therefore, a need to determine the adequate capital mix (including human capital--management and specialized skill) for the enterprise, keeping in mind that this will change through time according to the organization's general goals. Agricultural innovations derived mainly from biological and chemical sciences, together with improved working techniques, normally do not require intensive fixed capital, yet their application increases agricultural production and productivity, making them especially appropriate for the early stages of agricultural development where short-term credit is more generally available than long-term. Later, as human skills are developed into organizational coordination leading to increased production and marketing capacity, more capital intensive methods will be required. This changes the enterprise's fixed and working capital mix, thus increasing the need for long-term credit which in turn will affect the demands to be faced by credit agencies. Thus, the country's economic directives should anticipate increasing capital requirements.

It is not easy to make a balanced use of capital. The technically optimal mix will, in many instances, be subjected to constraints imposed by capital sources and the lending policies of institutions that make capital available.⁴ It will also be affected by policy concerning debt repayment of

⁴This point has to be clarified, especially in relation to the balance between physical and human capital, and often between different forms of physical capital. When mechanization is introduced to a farm it will be relatively easy to obtain the credit to purchase all kinds of machinery (physical capital). It will be impossible, however, to obtain credit to train tractor drivers, and especially mechanics (human capital), who are so necessary for the good maintenance of such large investments. Another example is that, while often it is easy to obtain credits for pesticide, it will not be so easy to purchase the specialized equipment necessary for its correct application. Many other examples could be cited, but these two show the influence that capital sources and lending policies have on the possibility of making a balanced use of capital.

the production cooperative--whether it be undertaken collectively or individually.

A basic principle in cooperative farming is that capital contributions without work in the common enterprise should be discarded, except in unusual cases.⁵

The variety of the enterprise's capital needs will compel it to deal with several credit sources and their regulations. In LDCs, most of the sources of credit are governmental. Government credit policies, however, are commonly organized along the lines of private banking, often excluding small- and medium-size farmers who do not have collateral, or who cannot mortgage their land for credit guarantees. Supposedly, a cooperative structure improves the access of peasants to credit, but unless policies are clearly and specifically designed for this purpose, this does not necessarily occur. The implementation of supervised credit programs by state banks or other agricultural agencies (including rural credit cooperatives) is probably one of the most advisable recourses, although generally this type of credit will provide funds for only short- and medium-term needs excluding larger, long-run credits required for infrastructure.

Another source of short-term credit is through contracts signed early in the season with industrial processors using agricultural products as raw materials. This system of contract farming can be very beneficial in terms of the commitment it imposes on the farmers to perform their agricultural operations on time, something which is many times relaxed when government credits are used, and often explains poor performance in some enterprises.

One of the characteristics of cooperative farming is that the implementation of its policies is very sensitive to centralized control (through credit dependence, infrastructure limitation, etc.). While this may benefit coordination of overall agricultural development, it can also lead to excessive concentration of investment decisions in the hands of the government. This may allow a more rational use of scarce capital resources, but if peasant-farmers are not involved at some stage of the process, they may become alienated, jeopardizing the whole plan. Exclusive control of costly investments by the peasants, on the other hand, may prove wasteful.

d) Type of Farming

The type of farming which a production cooperative undertakes depends on three things: 1) The available resources; 2) the goals of the enterprise; and 3) the regional stage of agricultural development. The question of specialization or diversification, and the available agricultural technology will also influence such a decision. Given the level presently encountered in most of the developing nations, a system of diversified (rather than specialized) agriculture probably contributes more to the overall development process.

⁵Cases of this kind could be an important capital investment which would boost the general economy of the enterprise, allowing it to make better use of some of its other resources. It can also be the case to permit old members or dependents of former members to continue living on the farm and receiving some type of income for their survival. All these cases have to be very carefully analyzed to avoid situations which could impair the institutional goals.

A farm is defined as diversified when its organization includes several crop and livestock enterprises which contribute significantly to total income. The degree or level of diversification will depend on the number of enterprises and on the magnitude of the contribution to total income of each of the enterprises.

Specialization is defined as having only one or very few sources of income. Although several enterprises may exist, most of them will be mainly complementary to the leading one.

Some of the advantages commonly attributed to specialization are:

- a) Increased output leading to decreased costs and increased profits;
- b) Labor specialization resulting in higher productivity;
- c) Development of expertise both in terms of the technology for better and more efficient production and in terms of marketing channels;
- d) Easier and faster training of new workers. This is especially relevant when there are labor shortages or when a sophisticated operation is performed. (Wine making, growing and packing fruit for export, poultry operations, etc.);
- e) Less diversified maintenance skills and costs, thus freeing labor and cash for other uses;
- f) More routinized work, leaving more time available for other activities, such as education or cultural programs and social events;
- g) More specialized capital equipment with fuller use.

Diversification can take two forms: horizontal diversification, the production of a number of commodities, and vertical diversification, which refers to the carrying out on the farm of several stages of production. With a large enough farm, if resources are available, vertical diversification may capture most of the advantages attributable to specialization.

Some of the reasons favoring diversification are the following:

- a) Exogenous forces and circumstances cause diversification spontaneously, such as climate, topography, and the generally seasonal character of agriculture, all favoring diversification for a better use of resources, both physical and human. The need to provide full-time employment to cooperative members is a strong incentive for diversification.
- b) Diversification is one of the best means to reduce risk by broadening the economic base of the enterprise.
- c) Diversification permits an adequate crop rotation, thus maintaining soil fertility and preventing the attack of pests and diseases.
- d) Given the inadequate sources of credit in LDCs, an important role of diversification is the contribution it can make to a better cash flow and general financing of the enterprise. This is important when credits are expensive and hard to get, and when monthly advances are required to maintain the members and their families.

e) A final point favoring diversification is the kind of flexibility it provides. Growth of intermediate products (such as corn, oats, barley) allows either immediate sale or conversion into other products like hogs or poultry. Vertical diversification and integration can make an important contribution to employment and income while representing a move towards gradual specialization in some products. For example, in fruit production different seasonally complementary fruits may be grown (apples, plums, cherries and peaches--horizontal diversification), harvested, graded, processed and marketed (vertical integration and diversification).

From the point of view of labor management in a production cooperative, the type of farming adopted will determine the possibility of operating at full labor capacity. Diversified farming may also include smaller specialized groups, which can facilitate incentive systems and wage differentiation.

There are many analytical aids which can be used in trying to obtain the best combination of enterprises, such as linear programming, budgeting, or the analysis of farm records. The process of selection will normally take longer and be harder in cooperative farming than on a private or a state farm due to the advisability of involving members in it. The knowledge and understanding peasant farmers can bring into the process must be matched by the economic and technical information which management provides. General membership discussion should cover a diversity of points, such as labor use, financing, yields, inputs, marketing channels, income and service to members, etc. Trade-offs have to be debated--profits versus employment; capital needs for later expansion versus present advances and yearly income; mechanization or incorporation of new members, etc.

A final comment regarding issues in cooperative farming has to be made about the importance of collective action. The promotion of a cooperative spirit and the creation and implementation of an adequate system of moral and economic incentives are probably among the important elements for cooperative success, and are a challenge to cooperative leadership. Special devices such as elections and information meetings to maintain collective action must be developed and institutionalized to avoid a falling off in member participation.

The Management Function

Management as a professional discipline is a relatively new notion which can be traced back to the early parts of the present century when the concepts of scientific management were introduced by Frederick W. Taylor (See Chapter II). In modern times management and management functions have become systematically analyzed and generally associated with the institutional framework of organizations; more specifically, of corporations. Most of the research and writing about management in the last half century has been devoted to its analysis in the industrial process. Management in agriculture, widely identified with farm management, has evolved mainly around the institution of the family farm in the United States. Its analysis, methodology and recommendations, closely associated to the American framework, have not usually dealt with large-scale farms, particularly of the cooperative kind which are seldom found in the United States (except for some religious communities). In the absence of specific research on cooperative farm management, and given the many advances which have been made with management by social and behavioral scientists, the careful use of their work and findings for the analysis of agricultural enterprises seems advisable.

Definitions of management vary (see Doll, Rhodes and West, p. 29, and Ralph C. Davis, in J. F. Mee, p. 9); but in any case the notion implies a process which uses resources (human and physical) to execute a task necessary to achieve certain objectives.

Henri Fayol, a Frenchman, in 1916 was the first to identify management functions, classifying them as planning, organizing, commanding, coordinating, and controlling (see Mee). As the study of management developed, some additions or modifications to these basic functions have been made; in particular, the replacement of "commanding" by a somewhat different function of "motivating and/or directing," more appropriate to cooperative farming.

Management functions in a cooperative enterprise are the same as those of any other type of organization of similar size and complexity. However, the way in which those functions are carried out will be different due to the special kind of relationship that exists between workers and management. If management succeeds in its task of motivating membership to participate actively in the operations, then management is in the hands of an elected body restricted in its rights by those of the general assembly of members. The manager then has a somewhat weaker and ambiguous position and will not have the type of authority undisputed by labor which may be found in private corporations or state agencies, where workers have little or no involvement in the management process. Management under these conditions will need special leadership characteristics. Schiller has given so much importance to this factor, that according to him, it should limit the creation of production cooperatives. "Since the question of management is of decisive importance for the success of the common enterprise, one should proceed with the introduction of cooperative farming only to the extent that capable leadership is available" (Schiller, 1969, p. 34; underlining is mine). Schiller's position shows the importance of developing adequate leadership training programs for cooperative farming in LDCs. In more advanced countries like France, Spain, or Germany, cooperative farming has gradually been increasing, but only as natural leaders emerge locally to take over the responsibilities of organizing the system.

1. Planning: Planning is the process of developing alternatives to achieve selected goals. In cooperative farming, as in any agricultural enterprise, this stage calls for the elaboration of the production plan. A detailed listing of the resources available, the different alternatives for combination of crops and enterprises in such a way as to utilize efficiently the scarce resources, and estimated income results which they may provide to the members are some of the things which must be considered. Sources of inputs and marketing alternatives will be very important for the accuracy of costs, returns, and members' income estimates. Feedback between members (workers) and management is an important element during the planning process in cooperative farms. In agriculture, unlike industry, there are some natural factors which may force plan changes at the last moment. A drought, excessive rain, or a plague may eliminate a crop from the plan and another one must take its place rapidly to prevent income loss, necessitating speedy adjustments and flexible mechanisms for planning and decision-making.

2. Organizing: This is the process by which resources are combined to carry out approved plans by analyzing interrelationships among different work activities. It is a very dynamic function. Guidelines exist, but overall, management is responsible for day-to-day operations and decisions, the organizational framework, and the assignment of responsibilities (either individually or to committees).

Job descriptions are desirable, although this common practice in industry is not always possible in agriculture due to the changing character of job circumstances. Cultivating corn or potatoes, which may be done mechanically in one field, may need to be done manually in another because the plants have grown faster or because the soil is not adequate (it may be rocky or flooded, preventing the use of equipment). The manager must know how work is best performed. As complexity increases, functional organization and labor specialization become indispensable. Delegation of authority or decentralization of decision-making will then be advisable to facilitate the production process.

3. Coordination: Coordinating is closely related to organizing and often performed simultaneously. This function is often incorporated into the tasks of the organizing function in industrial management. In agriculture, however, coordination becomes especially important on large farms where intensive production takes place. Mechanized equipment will be needed in several places throughout the day. On large farms this may mean locations 10 or 20 miles apart, so if adequate coordination is not present heavy losses may occur. Labor needed for different activities during the day must be adequately scheduled, and so, too, must water for irrigation, which if not used opportunely will be wasted in addition to causing damage by flooding. The importance of coordination will, then, be dependent on the size and complexity of the enterprise.

In cooperative farming these two functions--organizing and coordinating--are normally performed by the manager, and by those to whom he or the management board has delegated authority. Due to the characteristics of equality found in cooperative farming, whenever delegation is made to a member, a clear description of his job and responsibility should be made and communicated to the general membership to avoid conflicts which might occur among members who may resent being "bossed around" by their peers.

4. Motivating: Although theoretically members know they are working for their organization and therefore for themselves, the sense of "belonging" and identification with an organization is not easily come by. The motivating functioning is therefore geared to create and maintain the interest and the desire of all the people in the organization in achieving predetermined goals in accordance with approved plans. Leadership will be a predominating factor, followed by the need for effective communication.

Orders management gives should have certain basic characteristics which Flippo has stated as: "relevance, reasonableness, completeness, clarity, courtesy and acceptability" (E. W. Flippo, p. 81). In cooperative farming, positive motivation rather than negative (fear of punishment) should prevail, not only because it helps build up the sense of belonging to the enterprise, but also because management is in a weaker position to make use of ordinary negative motivation techniques (lower salary, lose the job, lose status).

5. Controlling: Controlling involves the regulation of work activities so they meet the necessary standards and specifications as planned. Adjustments to meet the final goals may call for a re-evaluation of the plan and the introduction of important modifications. In order for a controlling factor to operate, a set of standards against which to measure the different tasks must be set. This practice, widely used in industry, is hard to implement in agriculture due to the many interrelationships among variables, some already discussed in the section on organizing. Nevertheless, standards can be formulated.

In intensified agriculture, planting and harvesting periods must be closely followed in multi-cropping; so must sanitary practices in fruit production. Time and quality of jobs like sheep shearing, tractor plowing (varying according to type and depth of soil) and potato harvesting can be determined and performance measured against them. Job description and standards may be used in the elaboration of the payment system (or advances) which is adopted. They will also be useful in the preparation of an incentive system for the organization. However, standards should be voluntarily adopted by members. Managers will often face the conflict between popularity and disciplines. Probably the best way to deal with this problem is for management to build up a group of committees which will be jointly responsible with management for the elaboration of standards and the control of performance in work.

6. External Activities

A key element in the success or failure of production cooperatives is the institutional framework within which they operate, and more specifically, the kind of support system they can rely on. Where cooperative farming is a government-promoted policy, other complementary measures must be taken to ensure that they are able to operate efficiently and successfully. When cooperative farming grows spontaneously, as is now the case in some of the European countries, adequate legislation and other measures will be needed to allow the system to operate competitively within the general economic framework.⁶

Management generally takes direct responsibility for most external activities.⁷ Some of the more important external activities of management

⁶Government action should not indiscriminately protect the cooperative structure, but rather provide the institutional framework enabling cooperatives to operate as other organizations. In France, for example, legislation on cooperatives was designed for the marketing of produce, and their regulations were not suitable for the problems of joint production (membership numbers, regulated withdrawal of contributions, etc.). To allow the GAEC's operation, legislation in 1960, 1962, 1964 and 1966 was enacted. In Spain, similar problems were encountered for the implementation of group farming attempts in the earlier years. Several regulations were dictated gradually, but it was the Act of February 11th, 1969, which laid the groundwork for the expansion of the movement (OECD, 1972). In Chile, during the early years of the land reform program of the Frei government, asentamientos were de facto societies which were not able to obtain credit because they could not meet the legal requirements. Even after the asentamiento was legally recognized, banking regulations did not allow them to benefit from special loan funds for agricultural promotion. The author visited several asentamientos in 1967 and 1968 with a team of economists and lawyers from the Central Bank to explain operating procedures so the Bank could make adjustments permitting the asentamientos to operate through "prestamos con presupuesto de caja" (special cash-flow type loans) and to obtain agriculture loans at low interest.

⁷This does not imply that the manager acts alone in the representation of the cooperative enterprise. On many occasions he will act jointly with other officials, as would be the case when credits are secured and for which --depending on the size--the President's and the Treasurer's signature will be required.

which can be mentioned are: official representation of the enterprise, financing, marketing, and obtaining access to new technology.

a) Official representation of the enterprise. This activity takes a substantial amount of the management team's time, particularly that of the manager.⁸ An adequate handling of relations with national or local agencies is important because it influences both the image and the kind of treatment received from external institutions.

b) Financing. This is probably one of the most important management activities. Internally, it covers accounting and budgeting, of which more will be said later. Externally, it includes acquiring funds from various sources of credit to obtain and to pay loans for short-run needs or long-run investment. It means dealing with local banks or with the major government agencies where the main sources for investment are usually obtained. It means dealing with the supplier from whom credit must be secured, or with the purchaser of output from whom rapid payment must be obtained. Mishandling of the cash flow may lead to a temporary financial embarrassment,⁹ which, even when not serious, may very well put the whole operation in jeopardy due to the mistrust it instills in members.

c) Marketing. Marketing deals in both inflows and outflows. Continued market information is an inflow, and should enable the enterprise to make the best use of different alternatives. Another inflow is the supply of inputs for the proposed production plan. The sale of output is probably the activity with which marketing is mostly identified. The marketing channels available to the cooperative are of special importance because they may influence the possibility of vertical integration,¹⁰ expanding employment opportunities, or adding to sources of income. Integration into specialized, one-product marketing cooperatives is one option. In this case, the institution (wheat, rice or corn cooperative) does most of the handling or direct selling of the product in the wholesale and retail market. Retail marketing is fairly common in vegetables, especially in

⁸Official representation covers such wide areas as inauguration of the town's football field, lecturing about the cooperative and its activities, briefing bank officials on the enterprise's operations, etc.

⁹Some common types of financial embarrassment which may take place are: a delay in the payment of members' advances; a delay to pay suppliers, who may complain to members, thus giving the impression of not meeting commitments; and the need to postpone payment of bank loans. While these may occur due to an inaccurate cash flow, they may also be due to unfulfilled commitments by third parties which affect the cooperative venture. Good understanding by members of the reasons causing this situation and the measures to solve them will help avoid critical situations.

¹⁰A distinction must be made at this point between marketing channels and the market. Producers do not face consumer demand directly. They commonly face the demand of intermediaries, and it is in this sense that marketing channels influence the possibilities for vertical integration. If the production cooperative has channels open to reach consumers directly, it may engage on in-farm processes such as grading and packing for retail distribution. If this is not the case, then producers will sell their output to wholesalers as harvested, meeting only some quality specifications. Integration, then, will not be possible.

farms close to large urban centers.

d) The Search for New Technology. A final important management activity, which some authors have included as a function in the management process (J. F. Nee, p. 68) is the search for technical innovation to intensify agricultural production. Aggressiveness and caution are both necessary in the search for better options.

7. Internal Activities

In cooperative farming, internal activities are especially relevant, furnishing not only the means to earn a living, but also the vehicle through which members exercise their ownership rights and responsibilities. Management therefore has to be sure to involve members in different internal sub-functions.

Some Internal Activities are:

a) Organization of Work. Final farm output depends on how well things are planned, organized and done. Work is also a potential source of discontent or satisfaction. The basis for an adequate organization is a well-elaborated and realistic production plan, detailing possibilities in technology, input, cultivation practices, incentives, work assignments, etc.:

b) Maintaining Financial Records. Records of all financial activity of the enterprise must be accurately kept, including detailed accounts of debts incurred and credits granted, a cash flow chart, and records of members' accounts.¹¹ The pattern of income distribution to be followed should be clear and well explained to members, thus avoiding false expectations which may end up as grievances against management. Financial information to the general assembly should be carried out on a regular basis.

c) Coordination and Control. The coordination of internal activities is important to ensure good use of available resources. To perform this activity, management needs to have a good knowledge of (and be experienced in) the tasks to be undertaken. Use of tables and schedules with the earliest and latest dates on which the different tasks may take place will be valuable for all three subfunctions: organization, coordination and control. Responsibilities may be assigned and clearly delineated. Deficiencies may be

¹¹The internal financing of members will not be difficult; the most common system is for each one to have a charge account with the cooperative which is balanced once or twice a year, according to crop sales and account audits. Attention must be called, though, to the special care with which these accounts receivable must be handled, because they may become a source of one of the largest drainages of funds, and later a cause of internal conflict when members find themselves in debt even after their share of income has been credited. Members must realize that the higher incomes they can obtain from an efficient and successful farming operation must not be geared only to allow for increases in their consumption levels, but must also serve the purpose of contributing to the necessary capital formation.

rapidly overcome, and later adjusted for future operations. Gradually, all three activities should move as a set of gears.

d) Member Education. Membership education is important not only for technological aspects, but also to group harmony. As part of this sub-function one may well include the working rules used to judge and discipline members. Discipline requires the creation of a mechanism to carry it out. Management should not take on the burden of this responsibility alone, but should use an elected committee with wide representation for this purpose.

e) Internal Communications. Internal communications is important in cooperative farming to build up esprit de corps and maximum member involvement and responsibility. Regular meetings and elections may be seen as devices to promote member participation. Information feedback flows from management to members and vice versa; if not done regularly, grievances may accumulate. Adequate flow of communications will also improve the speed and effectiveness with which the organization can react to crisis situations.

The Manager

After considering management functions and activities, it can be seen that the manager is a key element in the successful operation and prosperity of the enterprise. It is the qualifications of the manager that make the difference in production between two enterprises with similar resources. In interdependent organizations, workers are productive only as management--and the manager--equips them and coordinates the work of an individual with his fellow workers.

In cooperative farming, due to its special characteristics, the manager will need several distinctive features, among which leadership, flexibility and adequate training can be emphasized (Raup, Dec. 1969, p. 1276.). The manager's background and personal experience will influence his understanding of the job and his ability to perform it; but in general, if the person has some basic qualifications, he may be trained for the job.

Training of cooperative management personnel should be distinctively geared to operating a complex organization dedicated to agricultural production and worked by its member-owners. The kind of training to be devised is beyond the scope of this presentation, but it can be stated that in general it depends on the background and educational level of the trainees, on their experience, on their perception of their role, and on their natural leadership abilities. The availability of auxiliary personnel and the kind and amount of external support systems in different areas of activity will also influence a management training program.

Managers are not always hired; they may be appointed by the government (a very common practice in the initial years of most of the systems); or elected by members (more characteristic of older schemes or those emerging in advanced countries where members have higher educational levels). The manner by which a person is selected to fill a manager's position is important. Commons opposes the election method for choosing a manager: "...the cooperatives /could not/ elect the businessman who could master the intricacies of the markets. The successful businessman cannot be elected repeatedly by popular vote. He elects himself out of the struggles of competition and the rivalries for promotion" (Commons, 1934, p. 757). Election by popular vote does seem, then, to be the best method.

The selection of an appointed manager will be influenced by the

perception of the manager's role. Appointments may be influenced by political considerations.¹² Too much emphasis may be placed on a single skill--a good accountant is not necessarily a good leader nor a good manager, neither is a human relations specialist. The Yugoslav system has a selection committee formed by representatives of the enterprise, national and local government. In any case, an appropriate mechanism for manager selection is a basic element in the promotion of production cooperatives.

In developing nations, where cooperative farming is being created as part of an agricultural development and reorganization process, this report recommends having outsiders as managers because usually peasant members do not have necessary skills to perform the job efficiently, and also because very often the government wants to maintain control. The way in which the manager gets his position and the way in which his salary is paid have an important effect on the way in which he tackles his job and the manner in which he will be looked upon by those he has to direct and lead. Unfortunately national leaders often issue sweeping directives which lack the flexibility required to cope with varying situations in diverse communities.

The manager who gets his job without member participation is in a difficult leadership position. Very often he sees his source of legitimacy in those who appointed him and not in the members who should in reality hold the power and sanction the authority of the manager. This does not necessarily mean that a manager placed by outside powers will always fail. If he has a clear perception of his role, adequate training, and a willingness to transfer his power into the hands of those who legitimately should have it--the peasant member-owners--he can succeed. Leadership involves a delicate balance among three factors or forces: 1) the forces in the manager himself (his value system, the confidence in his subordinates or collaborators, his natural inclination to leadership, and the feeling he has of the control of the situation); 2) the forces in his subordinates or collaborators, their sense of responsibility, their interest, knowledge and experience in the work at hand, their participation in decision making); 3) the forces in the situation (type of organization, effectiveness of the group involved and the types of problems to be solved).¹³

¹²Political consideration in the appointment of managers is probably among the best known criticisms of the system, from the days of Soviet collectivization up to the present date. In Peru this has been one of the main sources of discontent among the workers in the sugar plantations taken over by the land reform. In Chile, the replacement of professionals by non-technical appointees whose only qualification seems to be . . . militancy in the right party of the coalition in power, has been publicly denounced in 1971 by several professional associations, and by peasant organizations.

¹³For a more detailed elaboration of these forces and leadership style, see Tannenbaum and Schmidt; for other sources on leadership and leadership style, see Jolembiewski, Koontz and O'Donnell, L.F. Carter, Filley and House, Selznick, Litterer.

It is up to the manager to try and maintain an equilibrium between these forces, while fostering member involvement and participation so they can gradually take a more important role in the operation.

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CHAPTER IV: NEW FORMS OF COOPERATIVE FARMING IN AGRICULTURAL
DEVELOPMENT: THE ASENTAMIENTO AND THE UJAMAA

In the 1960s many countries reorganizing their agricultural sectors or trying to improve them searched for new ways to organize their production units. The cost and difficulties of a family farm pattern, on the one hand, and the difficulties and commonly recognized inefficiencies in some aspects of state farms, on the other, turned the interest of policymakers more and more towards cooperative farms.

In response to this interest, the asentamiento emerged out of the Chilean land reform, and the Ujamaa was originated by policies to reorganize Tanzania's agriculture after independence. While both represent a new and original organization created to deal with the specific problems of each country and each situation, it is possible to find in them some influences which may be traced back to experiences with older models of cooperative farming.¹ A comparative analysis of these new models with the older ones will be made in the following chapter.

The Asentamiento

1. Introduction

Land reform was a major issue in the 1964 political campaign of Eduardo Frei, who in September of that year was elected President of the Republic of Chile. As expected, an important part of his government's effort was oriented towards the implementation of a legal land reform that would conform to the national democratic tradition. Part of the new approach to the land reform was the creation of an intermediate stage between expropriation and the assignment of the land to new owners. This stage has been called the Asentamiento.

The following pages will try to give a view of how the system operated between 1965 and 1968. The present study is based on observation of the Asentamientos in the fourth zone of the Land Reform Agency (Corporación de la Reforma Agraria--CORA), which is responsible for the province of Santiago. This province is of great importance in the overall land reform process because it contains the nation's capital city which holds about one-third of the country's total population. The climate, good quality of the soils, irrigation conditions, and nearness to principal marketing centers, make this region one of the best in the country for agricultural production.

On October 30, 1968, the responsibilities of CORA in the fourth zone included the following: of a total irrigated area of 240,490 hectares in the province, CORA expropriated 131 farms with a total irrigated surface of

¹See LTC paper (forthcoming), Boguslaw Galeski, "Prospects for Collective Farming," and Chapters 2 and 3 in the author's original Ph.D. thesis, "Management in Cooperative Farming," Departments of Agricultural Economics and Business, University of Wisconsin, Madison, 1972, for a discussion of older models of cooperative farming.

26,965 Has. or 11.21 percent of the total. By December 31, 1968, there were 79 Asentamientos operating on 22,459.5 Has. of irrigated land and 292,022 hectares of dry land.

The beneficiaries of these expropriations were 2,415 peasant families. (CORA, 1969)

2. Definition and Objectives

The Asentamiento is defined by law as the "initial and transitory stage of social and economic organization of the peasants in which lands expropriated by the Land Reform Agency (CORA) are worked during the period lasting from the moment of material takeover of the land until its assignment according to the article N-67 of the law " (Law 16,640, Art. 66)²

The main objectives of this intermediate structure are the following:

- 1) To work the land comprised by the Asentamiento efficiently, improving its production with the assistance provided by the Land Reform Agency.
- 2) To prepare and train the asentados so they may assume, at the end of the Asentamiento, the full responsibility of agricultural owners and entrepreneurs.
- 3) To orient and impel the development of the community, promoting the preparation, creation and strength of its cooperatives and basic organizations.
- 4) To promote the capitalization of the asentados, attempting to use higher incomes principally for that purpose.
- 5) To build the minimum infrastructure required for development of the family and community life of the asentados and future owners, and also the necessary infrastructure for the normal, actual and future exploitation of the farm " (Law 16,640, Art. 66).

To fulfill its legal objectives on each farm, an independent Land Reform Agricultural Corporation (Sociedad Agrícola de Reforma Agraria-SARA) was created as a legal entity in which CORA (as the owner of the land and water) and the peasants (as the providers of labor and agricultural implements) work together towards the achievement of these goals.

At the end of each agricultural year, a distribution of production profits is made among the partners through a procedure explained below.

3. Organization

When a farm is expropriated by CORA, the owner receives a prior legal notice and the peasants living on the farm receive an oral notice from one

²This law is still in force today and it is being used by the present Allende government. Some interpretations of the law are, however, different from the ones of the previous government, giving rise to strong political debates.

of CORA's employees in the region.

Once the farm is legally handed over by its previous owner to the agency, the organization process of the Asentamiento reaches its decisive stage. Information on each of the families living on the farm is gathered and a list of all those who according to the regulations may join the Asentamiento is made known during the first week.

To be accepted as "asentado" (member of the Asentamiento) the following requirements have to be met: a) One must be a peasant. A person is recognized as such when he has been an agricultural worker or employee, a tenant, or a sharecropper. Any person holding a university degree is not qualified.³ b) One must be married or responsible for the support of a family as the head of it. c) One must be more than 18 years of age. d) One must have a certificate of character.⁴ e) One must have the capacity for agricultural work.

Every person fulfilling these requirements is entitled to participate if he is willing to do so. The Asentamiento is a voluntary association of all the peasants, with CORA, who cultivate the farm. No one is forced to stay or leave, as long as he accepts the rules that will set the Asentamiento into action and regulate its performance.

If the farm is big enough to provide work, and later ownership, for more peasants than those actually living on it at the moment of the expropriation, neighboring peasants who fulfill the requirements and are interested in joining the Asentamiento are invited to join. The procedure used in the Talagante area (of the fourth zone) was to have a list of completed applications on file in CCRA's office. Agency officials did no more than check the data provided in the applications and then turn them over to the provisional board of the Asentamiento (or to the official management board if it occurred after the elections). They, through conversations with the candidates, decided which ones would be accepted. This was done to avoid bringing in people who might have completely different social values than the rest of the community, and who later could be a cause of conflict.

Then, as elsewhere, once the names of all those participating in the Asentamiento are known, the date for the election of the peasants who will constitute the management board is settled. This normally occurs in the first 10 days after the official inauguration of the farm.

³This point deserves special attention because in the previous land reform law No. 15,020 of 1963 there was a system for the assignment of land in which special points were given to all agriculture-related professionals. This gave them an advantage over the peasants or farm workers in the acquisition of land. This procedure was revoked in the 1967 law which is more oriented towards facilitating the access of peasants to the land.

⁴A certificate of character is issued by the identification and police department and lists any convictions that the person has had. It is commonly required in different legal procedures or when a person wishes to obtain an identity card, passport, driver's license, etc.

Election day has a special meaning for peasants because it marks their official entrance into the process that will allow them to become owners of the land which they normally have worked for years and sometimes generations.

Because of illiteracy among some of the peasants, a special system is used for the election. From among the peasants approved to join the Asentamiento, a number of candidates are suggested to the committee presiding over the election (formed by two peasants named "a viva voz" by the group and one CORA official). Each of the candidates is represented by a figure like those presented in Chart No. 1. One by one the peasants are called to sign the act of constitution of the Asentamiento and to vote (in a separate room) by secret ballot.

The system, except for the figures, is almost identical to that followed in the regular national elections. After all have voted, the votes are counted. Those with the five highest number of votes form the management board. They immediately meet and decide which of the two persons who obtained the two highest number of votes will be the president of the Asentamiento. Then the places of vice president, secretary and treasurer are filled. CORA's official, while present at this meeting, acts only as an advisor and he cannot decide or participate in the nomination for the distribution of these posts.

The results are made public and two peasants are designated to be part of the grading committee (see p. 47). A traditional celebration of the event follows.

The general assembly has no further official activity until the following year, when it hears the report of the management board and participates in a new election for the leaders of that year. Extraofficially, though, the management board usually calls for assembly meetings in which it informs members about the operation of the Asentamiento and general reasons for the action taken.

4. The Management Board

The management board is responsible for all activities of the Asentamiento, ranging from the agricultural exploitation to the transportation needs of school children. It is presided over by the president of the Asentamiento, who is usually in charge of coordinating all activities. It normally meets once a week and in the initial period a CORA official attends. The meetings commonly last from five or six in the evening until midnight. Minutes of each meeting are taken and in some areas a copy is sent weekly to the area chief as a way to maintain permanent information on progress made and in some instances as an accelerated process of consultation or application for required inputs.

To increase the participation of all peasants in the managerial process, the board forms different committees. The number of them depends on the size of the farm, the number of families, the principal crops, etc. In charge of each committee is a member named by the board. Common committees are: irrigation, finance, machinery, welfare, livestock, vegetables, etc.

The first step of the management board is to work out a fully detailed production plan and budget that permits the best possible use of the Asentamiento's resources. The peasants first list the crops they know best, and outline their requirements--which soils are best for each of them, what

Chart N* 1 : Figures used for voting

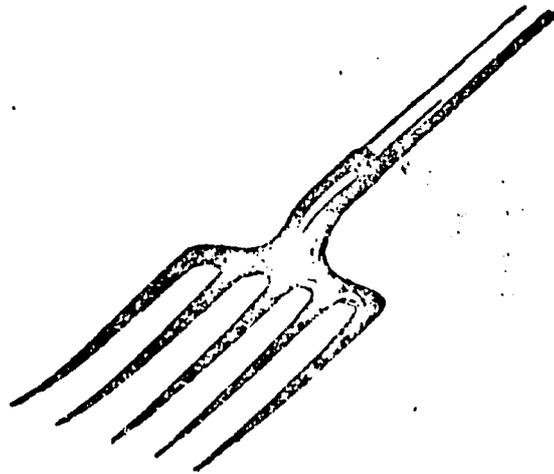
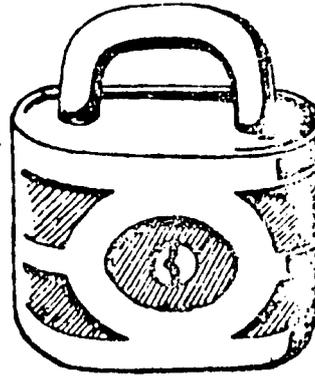
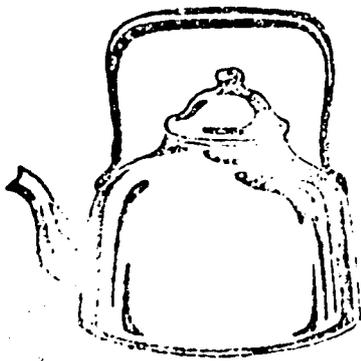
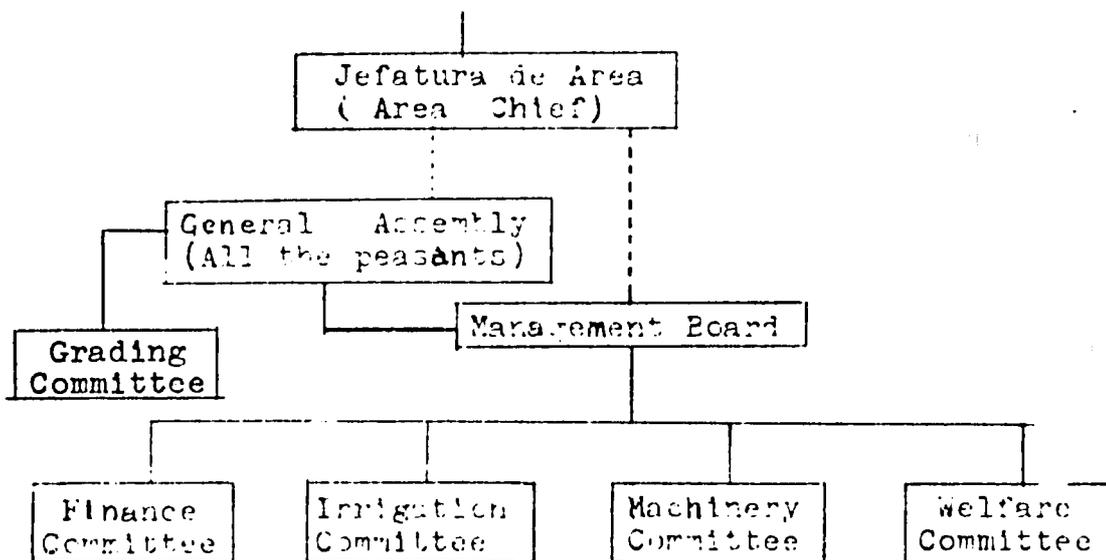


Chart N* 2 : Organization of an Asentamiento





the normal seeding period is, how many hectares they think they can work, etc. After this outline is made the board will analyze the plan with the help of special tables prepared by CORA agronomists to provide the peasants with information regarding costs and returns for each crop. This information facilitates the work of the board in choosing among alternative crops with similar requirements but with different returns that would change the income of the asentados. Tables No. 1 and No. 2 are examples of what is used.

The production plan is usually explained to the general assembly. Discussion of the plan is often lengthy, with members through questions or suggestions making a complete analysis of the effect of this working program on the community as a whole. Changes may be introduced. A definite plan, known and approved by all or by the majority of the assembly results from the meeting. After this step is completed, the plan and its corresponding budget are signed by board members and sent to CORA for revision and allocation of annual inputs and funds. CORA's budget, in turn, is based on an aggregation of the needs of the Asentamientos and its own normal operating expenses.

Coordination of the production plan is achieved via a progress chart filled out weekly after board meetings.⁵ This provides a better distribution of labor, machinery, and other resources, and it is of special importance when new techniques and improved production practices have been adopted by the asentados.

Although agricultural production is recognized by all as an essential part of the Asentamiento, it is by no means the only factor in the land reform process. The social effect of self-direction and natural community development is also very important. It is in this field that major accomplishments may often be observed. Education is an especially important activity; education to reach more children, special programs for adult illiteracy, sports, folklore, women's groups to discuss care of children, sewing and the participation of women in the Asentamiento, etc.

The management board has an unquestionable role of leadership within the Asentamiento, and on many occasions the performance of the system is closely tied to the quality of the peasants selected as leaders of the community and also to the advisory role fulfilled by CORA's staff.

5. Type of Exploitation

There are three possible types of exploitation: Individual, communal or a combination of both.

Individual: The peasant receives from the board a fixed area (normally 1 or 2 hectares) that he is supposed to cultivate with one crop already

⁵These forms were prepared by CORA's area agronomists and distributed to all the Asentamientos. The use of these forms and the possible benefits of them were discussed with each management board, which would appoint one of its members--usually the secretary--to keep them up to date. Most of the forms used to control the production plan were fairly simple and were posted on bulletin boards for easy access.

TABLE NO. 1

Summary of Estimated Profit per Hectare of
Different Crops and the Estimated
Periods of Income Receipts

| Crops | Profit/Ha.E* | Months | | | | | | | | | | | |
|---------------------------------|--------------|--------|--|---|---|---|---|---|---|---|---|---|---|
| | | M | J | J | A | S | O | N | D | J | F | M | A |
| <u>Cereals:</u> | | | | | | | | | | | | | |
| Wheat | 454 | | | | | | | | | | x | x | |
| Barley | 454 | | | | | | | | | | x | x | |
| <u>Row Crops:</u> | | | | | | | | | | | | | |
| Corn | 733 | | x | | | | | | | | | | |
| Sweet Corn | 2,446 | | | | | | | | x | x | | | |
| Potatoes | 3,234 | | | | | | | | | | | x | x |
| Early Potatoes | 1,952 | | | | | | | x | x | | | | |
| Dry Beans | (150) | | | | | | | | | | | x | x |
| Green Beans | 1,069 | | | | | | | x | x | | | | |
| Watermelon | 1,139 | | | | | | | | x | x | x | x | |
| Melons | 1,159 | | | | | | | | x | x | x | x | |
| Squash | 1,361 | | | | | | | | | | | x | |
| Sunflower | 636 | | | | | | | | | | | x | x |
| Peas | 634 | | | | | | | x | x | | | | |
| Lima Beans | 740 | | | | | | | x | x | | | | |
| <u>Pastures:</u> | | | | | | | | | | | | | |
| Clover/Alfalfa (Associated) | 57 | | | | | | | | | | | x | |
| Clover/Alfalfa (Established) | 646 | | | | | | | x | | x | x | | |
| <u>Vegetables:</u> | | | | | | | | | | | | | |
| Tomatoes | 1,423 | | | | | | | | | | x | x | x |
| Onions | 2,427 | | x | x | x | | | | | | | | |
| Cabbage | 2,411 | | x | x | x | | | | x | x | x | | |
| Celery | 1,287 | | x | x | x | | | | | | | | |
| Carrot | 2,482 | | Year round-4 or 5 Mo. according to weather | | | | | | | | | | |
| Lettuce | 2,165 | | " " 3 or 4 " " " " | | | | | | | | | | |

The period when income is expected is marked with an x in the months of the year column.

Source: CORA, Talagante Area, Department of Production and Marketing.

TABLE NO. 2

Table of Inputs and Expenses per Hectare

| <u>Early Potatoes</u> | | |
|--|--|----------|
| 1. <u>Seeds:</u> | 35 sacks at E* 51 | E* 1,785 |
| 2. <u>Fertilizers:</u> | | |
| | Nitrate: 300 Kgs. at E* .33 | 99 |
| | Superphosphate: 300 Kgs. at E* .45 | 135 |
| 3. <u>Use of Machinery (per hour):</u> | | |
| | Plow: 3 hrs. tractor at E* 20 | 60 |
| | Harrow: 1.5 hrs. tractor at E* 20 | 30 |
| | Plow: 3 hrs. tractor at E* 20 | 60 |
| | Harrow: 1.5 hrs. tractor at E* 20 | 30 |
| | Plow: 3 hrs. tractor at E* 20 | 60 |
| | Harrow: 1.5 hrs. tractor at E* 20 | 30 |
| | <u>Internal Transportation:</u> | |
| | 1 hr. tractor at E* 20 | 20 |
| 4. <u>Pesticides:</u> | | |
| | Insecticide to soil: 4 Kgs. of Aldrin at E* 13 | 52 |
| | Insecticide to plants: 2 Kgs at E* 10 | 20 |
| | 2 Kgs. at E*34 | 68 |
| 5. <u>Freight:</u> | | |
| | To the Asentamiento: 3,404 Kgs. at E* .035 | 119 |
| | Produce to the market: 20,000 Kgs. at E* .035 | 700 |
| 6. <u>Containers:</u> | | |
| | Sacks: 250 at E* 2.10 | 525 |
| | Cord: 2.5 Kgs. at E* 14 | 35 |
| 7. <u>Labor:</u> | 47 Man/days at E* 10 | 470 |
| | Months: <u>Aug.</u> <u>Sept.</u> <u>Oct.</u> <u>Nov.</u> <u>Dec.</u> | |
| | Man/days: 4 8 5 10 20 | |
| Total Expenditures of 1 hectare of early potatoes, E* | | 4,298 |
| Total Gross Income 1 ha. of potatoes (250 sacks at E* 25 | | 6,250 |
| Estimated Profit per Hectare | | 1,952 |

Source: CORA: Talagante Area, Department of Production and Marketing

decided by the production plan. The location of this area in the field (potrero) is determined by a raffle among all those sowing the field. All the inputs used by the peasant in the cultivation are charged to his personal account, and when his crop is sold, all the returns are credited to him. A deduction is also made for CORA's participation. This will be explained.

Communal: All the expenses and returns made by the crop are part of the exploitation of the farm, and will contribute to final profit or loss of the operation. The decisions concerning the attention of the crop are made by the management board. The main difference between the systems is that in individual exploitation the crop is the full responsibility of the peasant, and the amount of return will depend on his ability, the quality of his work, and the market prices at harvest time.

The decision of what system to adopt will depend largely on the capacity of the group to work the crops planned effectively. The kind of crop to be cultivated will also influence the decision. For example, on one Asentamiento where there was only one skilled person to cultivate vegetables, the crop was communal and this peasant was in charge of the committee that did all the work on the vegetables. In a way he was the teacher of his companions. On another Asentamiento where most of the peasants were skilled in vegetable production the crops were individually exploited.

The most common situation is that the peasants choose a combination of the two types of exploitation. Communal production is used for extensive crops like wheat, barley, or pastures. More intensive crops like vegetables, or row crops such as potatoes, beans, peas, and corn will be individual. This is not, however, a fixed rule, and the Asentamiento structure is flexible enough to allow what is considered best by the participants.

CORA's role in this decision is, as in many others, that of an adviser, pointing out the advantages and disadvantages in each case. CORA has usually encouraged the communal system, especially for extensive crops, but it has not forced the peasants towards that decision.

6. Relations of the Asentamiento with CORA

It is evident from the above discussion that CORA's performance is of great importance. The relationship of the Land Reform Agency to the Asentamiento has two aspects: that of adequate and timely supply of inputs and cash credit, and that of general assistance in the operation of the Asentamiento.

1. Supply of inputs and funds.

The basis for this is the production plan and budget. CORA, as a major purchaser, exercises its bargaining power to obtain better conditions for the peasants. Direct imports of fertilizer and some pesticides, and large volume purchases of seeds like wheat, hybrid corn and beans, have allowed the agency to supply these inputs at prices ranging from 10 to 30 percent less than current market prices. For the purchase of some types of seed like potatoes and vegetables, the agency asks the asentados to participate in the acquiring process. The peasants name delegates who, together with the CORA representative, inspect the different seeds and select the ones to be purchased. The inputs are sent to the Asentamiento on credit, to be paid at the end of the agricultural year. In some cases, the Asentamientos obtain cash to buy their inputs directly, or they obtain direct credit services from the sellers. This last procedure has been encouraged on the

more efficient Asentamientos and has increased as the sellers observe the stability and good performance of the peasants.

Funds are supplied monthly, according to the yearly budget, and adjusted if necessary. Funds are used for the payment of operating expenses and also for the advance that is given to the asentados for their monthly needs. The amount of this advance, which is equal for all members, is determined at the beginning of the year by the peasants of each of the Asentamientos, usually in accordance with possibilities appearing in the production plan-- a good method of teaching financial responsibility to the peasants. The amount paid in advance has been generally 50 percent higher than the minimum wage fixed by the government for agricultural workers. The advance comes on a per day basis and is charged to the personal account that each asentado has in SARA (Sociedad Agrícola de Reforma Agraria). The total sum is deducted at the end of the year. The monthly budget (income and expenses) is examined by the finance committee, which reports to the board on current vs. projected progress.

2. General Assistance.

Accounting services are among the most important provided by CORA. In every Asentamiento a cashier, generally hired from off the farm, is in charge of the bookkeeping and handling of the money. He is trained and controlled by CORA's accounting department staff, and is a member of the finance committee of the Asentamiento. All funds are handled through a joint checking account which the president and the cashier sign together. All accounting records are kept on the farm and audited monthly, providing the information required to work out the yearly balance.⁶

Another important service is community development. Surveys indicate group interests, and specialists help the asentados transform this interest into action, working with the basic organizations of the peasant community. Pre-cooperative education is a topic of great importance in these programs because a cooperative organization will follow the Asentamiento once ownership is assigned. In many cases the peasants had already received some training in this area through the action of the Institute of Rural Education, a private organization which has greatly contributed to the achievement of better social conditions observed on many Asentamientos.

Infrastructural needs are also met by CORA to some extent. These needs are discussed with CORA's area chief who participates in CORA's interdisciplinary committee for regional planning. A complete area program determines the long-run requirements of the Asentamientos and distributes appropriate infrastructure as best as possible.

Technical assistance for agricultural production is one of the principal areas of assistance, and because of its importance in the measurable aspects of the land reform process, special effort is concentrated on it. Peasants are informed about better methods of cultivation and visit other farms and

⁶The system of accounting to prepare the yearly balances has not worked as expected due to CORA's excessive centralization, creating great peasant discontent.

experimental stations to see them applied. Daily sessions with full information on one important crop are held on one farm, and field demonstrations on various Asentamientos throughout the zone allow the asentados to observe modern techniques and the benefits of their adoption. Results of this effort are seen in the immediate adoption of some methods in the production process, in better yields obtained at the end of the year, and in innovations incorporated in the production plan for the following years.

7. Yearly Balance and Income Distribution

As discussed earlier, asentados receive a per day advance monthly which, together with the value of inputs and credits for capitalization, are charged to their personal account. In addition, a balance is made at the end of the agricultural year to determine the results of the operation and distribute profits among the partners (CORA and the peasants).

Pre-determined monthly payments present no problem. Profit distribution, in contrast, represents one of the most serious problems faced by CORA in its relations with the Asentamiento. Accounting systems now in operation usually have failed to provide timely and adequate information for the final yearly balance sheet and income statement, which are thus often delayed more than a year. Reasons for this failure were not clear. As Warner points out (Warner, p. 43), there are many reasons to explain why administrators operate without appropriate feedback, among them lack of knowledge about the adequate measurement of goals and the need for adequate feedback. Another reason is the underlying feeling that this information poses a threat to CORA and its program because it may become the basis for the re-allocation of resources by external decision-makers. An interaction among these three reasons is probable, especially when working with a newly created system. Whatever the causes, the delay in preparing the balance sheets, which prevents the peasants from knowing their real situation, has been a great hindrance to CORA's action.

Basically, the determination of the yearly balance is made as follows: CORA has provided all the inputs and cash funds needed for the exploitation of the farm. Products are sold as production advances, and on April 30 of each year the fiscal year is closed. All the income from production sold, warehoused products, livestock existence, etc., constitute the assets of the operation for that year. The inputs used, and all the operating expenses constitute the Asentamiento's liabilities. The difference between the two indicates the profit (or loss) of the yearly operation. Of this profit, CORA receives between 5 percent and 25 percent depending on the Asentamiento. On those Asentamientos where much work is needed to get the land in working condition because it had been abandoned, the percentage is lower to allow the peasants a higher return for the extra work invested. CORA's part of the profit is reinvested in the farm.⁷

⁷The reinvestment of profits has been primarily related to the availability of outside government funds for investments, but it is not considered in making investment decisions. That is, investments will be made if deemed necessary by CORA, even if no profits were made. Accounting procedures when ownership is assigned will have to clear up the application of this policy.

The remainder is distributed among peasants according to the following system: the total number of days worked during the year on the Asentamiento is divided into the peasant's part of the profit and a profit figure per day of work is obtained. To get the income of the asentado, the profit per day figure is multiplied by the total number of days the asentado worked during the year.⁸ This simple distribution of income is followed on the farm where all the crops have been cultivated under communal exploitation. On farms where both systems are used the peasant will receive his income from two sources--from his contribution of days to communal crop hiring and from his individual plot. The sum of these two incomes give the peasant's total yearly gross income. All advances and credits given him are deducted, and his net income is determined.

If the balance is in favor of the asentado he will receive that sum, and if it is in favor of the Land Reform Agricultural Corporation (SARA) his negative balance will be carried over to the following year. The negative balance found in the personal account of the peasant does not affect the total income which he received, and it will generally be due to heavy capitalization credits that have been charged to his personal account. This often occurs in the first year of the Asentamiento when the peasant has requested special capitalization credits to obtain the animals and equipment needed to work the land and improve his living conditions to some extent. Horses, plows, implements, tools, corrugated iron sheets, etc., are some of the items most commonly found in the personal accounts.

At the completion of the Asentamiento period, the total value of the farm being sold to the peasants has to be determined. All investments in the farm during this period are added to the expropriation value of it, and this total amount is to be paid by all the peasants receiving ownership in yearly installments over a period of 30 years.

8. Grading Committee

The grading committee is formed by three persons: two peasants elected by the general assembly and one CORA official who has been in close contact with the Asentamiento and its members.

Grading takes many factors into account: member participation in community organizations and activities, quality of work on communal crops, degree of work responsibility, production capacity demonstrated on individual crops (soil preparation, seeding time, weed control, irrigation methods, final yields, etc.).

On several Asentamientos grading is done every three months and made known to all the workers so everyone has an idea of their estimated performance. This gives those with a poor performance the chance to improve in the following months. If an asentado does extremely badly, the management board, based on the report of the grading committee, may suggest his expulsion from the Asentamiento. A special, extraordinary meeting of the general

⁸Normally all the asentados receive the same income per day of work based on the profit of the operation. In only one case among those observed, a special bonus of production, meaning a higher income, was paid. This was in the case of a person in charge of the winemaking process which requires day and night controls and highly specialized skills.

assembly has to hear both sides and approve or reject the measure. If expulsion is rejected, usually conditions will be set with which the asentado has to comply if he wants to stay. At the end of the year, the final report of the grading committee, besides being presented to the members, is sent to CORA, which uses it to determine priority when ownership is to be assigned.

Great controversies arise yearly around the need for a grading committee. Up to now, peasants agree it should exist because they recognize the need for selection and the existence of a procedure to eliminate those who may later become a drag on the community. But certainly they would prefer that this task be done entirely by CORA. The agency, though, is not willing to accept such a burden, and besides, grading by peasants appears to be contributing to their full responsibility in the process of land reform. As an example of the acceptance of this mechanism it is possible to look at the figures for the Talagante area, where from 11 Asentamientos operating on April 30, 1968, nine reported the grading done for the year on time. The two Asentamientos that were reluctant to do the work had poor performance due mainly to a lack of responsibility on the part of the asentados.

General experience has shown that in most cases the peasants have been able to perform serious and mature work accepted by the wide majority of the community.

9. A Tentative Evaluation

Any process involving socio-economic change, as is the case of land reform, will have various sets of goals, tangible and intangible, short run and long run. This variety makes the evaluation process complex and difficult.

Because of the differences existing among Asentamientos, measurements of the accomplishment of the social goals for a zone as a whole are very difficult. Evaluation turns then to the area of production, which is a relatively simple way to measure what has been achieved.

Warner's approach, adopted here, is to compare the exploitation of the farms before they were expropriated by CORA and after they had been working as Asentamientos. Data on the 34 Asentamientos working in the fourth zone at the end of the agricultural year 1967/68 will be analyzed under Warner's procedure of two points in time.

Table 3 shows that cultivated land both increases and becomes more intensively used because of the types of crops being exploited.

The number of families employed increased from 754 to 1,255. Employment of permanent labor increased by 66 percent. This does not consider the external labor occasionally used during some harvesting periods.

Another measurement under the same system has been the comparison of the valued production of farms and Asentamientos based on the surface of cultivated land. The same yields and the same average prices, base 1967, have been used. The result of this procedure shows a farm production of E*10,018,264.63 and Asentamiento production of E*19,773,645.25. The increase in the total value of production has been of 97.4 percent. This, expressed in terms of "quintales" (100 Kgms.) of wheat, means an increase of 248,734.8 qq. If the average yield for wheat in Santiago province is assumed to be 22.6 qq/Ha (censo 64-65), then this amount of wheat represents an increase in production of 11,005.9 hectares of irrigated land in the

TABLE NO. 3

LAND USE IN 34 ASENTAMIENTOS OF SANTIAGO

Agricultural year 1967/68 (in hectares)

| <u>Crops</u> | <u>Farms</u> | <u>%</u> | <u>Asentamientos</u> | <u>%</u> | <u>Increase %</u> |
|--------------|--------------|----------|----------------------|----------|-------------------|
| Cereals | 2,236.5 | 45.8 | 3,302.5 | 40.7 | 47.7 |
| Row-crops | 1,578.0 | 32.3 | 2,421.0 | 29.8 | 53.4 |
| Vegetables | 49.8 | 1.0 | 934.5 | 11.5 | 1,176.0 |
| Forages | 607.5 | 12.5 | 960.0 | 11.8 | 58.0 |
| Orchards | 22.0 | 0.5 | 64.0 | 0.8 | 190.0 |
| Vineyards | 343.7 | 7.0 | 343.7 | 4.2 | 0.0 |
| Industrials | 42.0 | 0.9 | 88.0 | 1.2 | 109.5 |
| | 4,879.5 | 100.0 | 8,133.7 | 100.0 | + 66.3 % |

Source: CORA, 1968 (see references)

province of Santiago (CORA, 1968.)

The most remarkable increase in surface planted, and in the value of its production, occurred with vegetables, which in valued production on the farms totaled E\$5,406,374.00. This shows a change in the traditional pattern of extensive crop production toward a more intensive agriculture which increases the productivity of the land and also provides more jobs for labor, thus helping to decrease rural unemployment and underemployment.

A review of what has already been presented, in terms of descriptive operation and comparative results, may lead to some conclusions regarding the fulfillment of the objectives stated in the Agrarian Reform law.

The figures on land use and the value of production show that there has been an improvement in the agricultural production on the Asentamientos relative to farms before expropriation, thus fulfilling the first objective in the law.

The fulfillment of the second and third objectives of the law is harder to evaluate because of the great dissimilarity in the starting point of each Asentamiento. Noticeable effects of the agency's efforts in the fields of training and community development vary through a wide range. Some Asentamientos are just starting and have had one year of operation: others have two years and are starting their third year. Conditions differ, but average results would indicate that the three-year period will be enough to allow the peasant community to take on self-direction.

It should be pointed out that for peasants and CORA officials, the concept of entrepreneurship (the second objective of the Reform) has been one of teamwork. The general European or North American concept of the individual entrepreneur is hardly applicable to land reform beneficiaries.

General conditions in the peasant community (low education, scant experience with decision-making, lack of sufficiently trained personnel and other socio-economic considerations) mean that group work through cooperatives is the best way to implement the goals of the reform in the post-asentamiento period. Peasants will have individual title certificates,⁹ but most services will be available only through the cooperatives which will replace the asentamiento structure. Teamwork evens out disparities in education, experience and agricultural know-how, permitting a higher average performance. Three years of Asentamiento experience and training seem adequate preparation for this future organization.

The rate of capitalization is the fourth objective of the Asentamiento. Although no figures for this were found, the observation of the personal accounts of the peasants on most of the Asentamientos in Santiago leads to some estimations. In the first year of the process, capitalization is close to 50 percent of the peasant's gross income for the year, and seldom will be lower than 30 percent. In the following years it will tend to decrease unless capitalization opportunities are offered to the peasants. (Special capitalization certificates issued in the fourth zone could not be used because of the delay in the presentation of final balance sheets, spoiling the whole mechanism devised to attract the high net incomes obtained and turn them into savings.)

The fulfillment of this fourth objective has been partially met and more imaginative models will have to be prepared in order to attract the peasant's income in the following years.

The fifth and last objective in the law is related to infrastructural needs. Principal efforts have been oriented toward housing, irrigation improvements, warehouses, and facilities to handle and store the crops. Area plans are being worked out to help accelerate and rationalize investments in infrastructure, but the size of those investments and the relative scarcity of funds impedes the complete fulfillment of this goal during the Asentamiento period. Progress to reach optimum levels can only be achieved through time and may well be one of the important ways to attract funds with capitalization incentives.

THE UJAMAA

1. Background

"The traditional African family lived according to the basic principles of Ujamaa. Its members did this unconsciously, and without any conception of what they were doing in political terms. They lived together and worked together because that was how they understood life, and how they reinforced each other against the difficulties they had to contend with--the

⁹This was the reorganized procedure under the Frei government. At present, an intense debate on this topic is going on in the Allende government coalition, with the socialists strongly opposed to ownership titles, and communists leaning toward collective ownership.

uncertainties of weather and sickness, the depredations of wild animals (and sometimes human enemies), and the cycle of life and death" (Iyerere, 1967, p. 1).

These words, which open President Iyerere's paper "Socialism and Rural Development," clearly show that the Ujamaa philosophy means a return to traditional Tanzanian forms as a basis for a modern socialist state.

After independence in 1961, Tanzania initiated development efforts to improve the conditions of a growing population of over 10 million people, the majority of whom live in scattered rural areas. In 1962, President Iyerere made his first agricultural policy statement initiating a major development program of rural transformation.

In February 1967, after almost five years of development work, the issuance of the Arusha declaration at a meeting of TANU (the government party--Tanzania is a one-party state) executives stated the need to give a new impetus to the party's policy of socialism and self-reliance. In order to accelerate rural development, a "frontal approach strategy" was devised "where the whole range of governmental and political institutions is mobilized behind the principles of Ujamaa, to ensure that some progress is made towards the long-term goal of socialist forms of production and distribution throughout the rural sector" (Second Five Year Plan, pp. 26-27).

2. Ujamaa: Definition and objectives.

The second five year plan for Tanzania's socio-economic development defines the Ujamaa policy as follows:

"To create a society based on co-operation and mutual respect and responsibility, in which all members have equal rights and equal opportunities, where there is no exploitation of man by man, and where all have a gradually increasing level of material welfare before any individual lives in luxury" (Second Five Year Plan, p. 26).

The objectives of this society, to be achieved through the collective work and decision making of groups of farm families, are to be the following:

"(a) Economic:

- (i) Increase in labour productivity potentially attainable through groups of farmers working together, compared to equal numbers of individuals working in isolation. (Realisation of this potential requires specialisation of function, division of labour, and strong leadership to guide the enthusiasm of group activity into productive channels).
- (ii) Economies of scale in purchasing, marketing, provision of services, and some field operations requiring mechanisation (including intermediate forms of technology).
- (iii) Openness to technical innovations, through increase in scale, readier access to farmer education, and removal from conservative influence of traditional environment.

(b) Socio-political:

- (i) Creation of self-reliant and self-determining communities following the tenets of the Arusha Declaration.
- (ii) Avoidance of exploitation and excessive differentiation in wealth, income and power.
- (iii) Raising the status of agriculture and reduction of the gulf between urban and rural life."
(A. O. Ellman, 1970a, p.2)

The cornerstone then of the new agricultural emphasis becomes the Ujamaa Vijijini where, according to Nyerere "a group of families will live together in a village and will work together on a communal farm for their common benefit." These villages represent a return to the traditional extended family system, but introduce modern technology to reach some degree of specialization and achieve higher productivity.

A basic characteristic of the Ujamaa, and one which has been strongly emphasized by President Nyerere is its principle of "voluntariness," which means that the movement has to expand by relying principally on persuasion. "Viable Socialist communities can only be established with willing members; the task of leadership and of government is not to try and force this kind of development, but to explain, encourage, and participate" (Nyerere, 1967, p. 21).

The fact that voluntariness is accepted and respected must not be viewed as a position of weakness in terms of expansion goals. The idea has been clearly stated on many occasions by government leaders that Ujamaa must, within a generation at most, reach and encompass the vast majority of the agricultural sector.

3. The Organization of Ujamaa.

The organization of Ujamaa villages will not always follow a homogeneous pattern. Rather, villages may be quite different as they adapt to the situation existing in the area of initiation. Varying pressures on land, in addition to differences in the agricultural resource base (climate, soil, water), are to be among the main determinants of the system adopted.

Since the village is the key element in the new organization, farmers are urged to leave their scattered shambas (farms) and join in new centers where the village is created. Two situations may arise. In the first one, the move is in many cases made gradually, as the farmers continue to rely on their old shambas until new crops are ready for harvest on Ujamaa lands. This is only possible, however, when farmers come to the Ujamaa from within a 5 to 10 mile radius of the new center, and in these cases government assistance is usually small, consisting mainly of transportation.

The second situation is when heavy population pressure exists on land. The government then encourages people to come to under-populated areas of the country, and provides these migrants not only with transportation, but also with tools, rations, cash and other needs to establish the settlement.

The motivation behind the move onto the Ujamaa varies widely. In some

cases it will be the possible access to land for landless workers in highly concentrated areas; in other cases it will be the possibility of having better services such as a pure water supply, schools, medical care and some mechanization to clean and cultivate the land. In both of these situations, however, there is also a conviction among farmers that Ujamaa organization is really a good alternative--maybe the only one, if not the best--to achieve higher standards of living by means of a concerted effort and mutual help.

The creation of Ujamaa normally follows four steps: planning, implementation, recruitment, and village organization (Musoke, p. 11-12). Planning. An interesting characteristic of the Ujamaa policy is the predominant role assigned to TANU, the political party in power. After the Arusha Declaration, it became the responsibility of TANU delegates and leaders to plan and promote the new system. A good illustration of this planning stage is the list of resolutions unanimously approved at a meeting in the west lake region.

- "(a) All citizens aged 18 years or above, with no employment that paid them 125 per month or without two acres of cultivated land (one for food crops and one for cash crops) should be encouraged and convinced to join the Ujamaa Villages, or New Settlements (malazi mpya) as they used to call them, in the selected areas.
- (b) All people around areas where the new villages are to be situated should contribute food and other requirements to the settlers.
- (c) 22nd April, 1968, was to be the starting day for the movement into the selected areas" (Musoke, p. 16).

After decisions are made with respect to the areas to be settled, the agricultural agencies of the district, together with TANU leadership, are responsible for implementing the movement of those recruited into the designated areas.

Recruitment has been one of the more controversial areas in the promotion of the Ujamaa. While persuasion and not coercion has been emphasized by Nyerere and other high officials,¹⁰ the excessive zeal of some local TANU leaders has resulted in pressures on the farmers to "volunteer" to move into new areas (Musoke, p. 17; Kayunga, p. 13; Mwiki, p. 25-23). However, many grass roots movements are found performing successfully as

¹⁰The president's commitment to freedom of entry may be well illustrated by his decision to remove five regional commissioners from their positions after complaints had been made of their pressures and coercion on peasants, forcing them to move onto the Ujamaa (Cliffe, p. 9).

reported by several authors (Huizer, p. 10; Ellran, *passim*; Jones, p. 1-11).

The internal organization of the village depends on the level of integration achieved. This, in turn, is related to the origin and motivation of the members. At the highest level of integration, all members work on the communal activities daily according to the division of labor agreed upon. At lower levels of integration, members will work only a few days on communal activities, devoting most of their time to individual cultivation. Differing arrangements may be found according to the group's decision. Tuesday, Thursday and Saturday for communal activities is a pattern found in some cases, while every morning for the community and afternoon for the individual is found in others. Private plots are found on almost all of the Ujamas, varying in importance depending on the communal crop and on the time the Ujama has been working. Gradually, efforts are concentrated on increasing communal farming, something which is discussed and must be approved by the general council of members, the main authority in the Ujama (also called the central village committee), which meets about four times a year. The functions of this council are: 1) to elect a management committee and all other committees deemed necessary for a good operation; 2) to elect a village chairman who represents the Ujama (together with the TANU official appointed by the central party leadership); 3) to examine and approve the production plan and budget drawn up by the management committee; 4) to examine and approve the plan for annual income distribution according to work contributed; 5) to examine and approve the reports of the management committee; 6) to approve new members or expel those not considered desirable by the group; and 7) to discuss and decide all matters of importance for the present and future action of the Ujama.

Attention must be called once more to the importance of TANU's role in the village's operation. TANU's appointed official acts as an advisor to the central committee, giving the necessary guidance to ensure that the basic principles of Ujama as laid down in the Arusha Declaration and other official documents are being followed. Of special concern is that communal activities actually take place, and not simply the use of the Ujama name to obtain government assistance. The second basic principle is the non-hiring of labor by members, at least on a regular basis.

4. The Management of the Ujama.

The management of the Ujama is done by the elected management committee assisted by as many other committees as is found necessary. The importance of the management committee and its size depends on the level of integration and the total number of members in the village.

Huizer reports that in the Ruwaa region, where the pioneering work on the Ujamas was done, the central village committee held elections annually with the participation of all members to select a chairman, a manager, a secretary/treasurer, and nine members to the management committee. This committee lasted three years and one third of the committee positions come up for election each year. Re-election was allowed (Huizer, p. 10). Assisting committees usually found are the financial (controlling all financial affairs with special emphasis on fighting corruption), the education committee, cultural and social activities committee, special crop committees, etc.

Musoke reports, for the case of Lutoba, a management committee com-

posed of 10 cell leaders plus the chairman and the secretary, all democratically elected. Two Agricultural Field Extension Officers (government employees) are also part of the management committee (Musoke, p. 20). Management functions normally include the coordination of all village activities. Special importance is given to the elaboration of production plans and a village budget which is later discussed with all members. Technological innovations are proposed in the plan to improve the productivity of agriculture. The management committee also makes various appointments of those responsible for specific village activities.

5. Members' Income.

Members' yearly income is composed of two parts: that coming from their individual plot, which they receive in total, and that coming from shares paid according to the number of days of work contributed to the communal center during the year. Fines may be deducted from their income or extra work assigned to members who have shirked their responsibilities. Sometimes special measures are taken to control the member in the future. In some cases, members are allowed to send a friend or relative as a replacement to fulfill their communal obligations. This must be accepted, however, by the management committee.

The main source of income of the Ujamaa comes from the sale of its agricultural output. Additional income also comes from the renting of village machinery and the services provided by their shops. Part of the revenues of cooperative ventures is kept for construction projects. In addition, a special emergency fund is formed by deducting between 5 and 10 percent of the revenues.

6. Assistance to the Ujamaas.

Different kinds of assistance are provided to the villages, depending on their size, location, level of integration and main agricultural enterprise.

The assistance of TARIU officials is most important due to the power and the commitment of the party to the Ujamaa policy. The presence of TARIU in almost all the existing villages in the country gives the party a special ability to control the correct political orientation of the Ujamaa, in compliance with national leadership directives.

A second type of assistance comes from rural development assistants (government employees) who basically do agricultural extension work, assisting the farmers in improving their crops. The work of these employees, while mainly technical, is at all times geared to promote the idea of the Ujamaa Vijijini.

A third type of assistance is geared to the formation of village leaders committed to Ujamaa. Training programs take place in several locations throughout the country to explain the concept of Ujamaa and its potential for development. Visits to some of the villages are made as a way to enlarge opportunities for exchanges of ideas. Ujamaas also host advisory teams who move into the village for some time and work with members to shape a comprehensive village plan. The teams consist of an agricultural technician, a livestock specialist, a land planner, an economist, an

irrigation specialist, a surveyor, a town planner, and a cooperative specialist (Huizer, p. 15). Other members may be added if their assistance is needed for specific problems within the Ujamaa.

7. A Tentative Evaluation.

An evaluation of Ujamaa policy is a complex task given the many variations existing within the system. Table No. 4 shows the rapid rate of expansion of the Ujamaa in the relatively short period of time since the turning point represented by the Arusha Declaration.

TABLE NO. 4
NUMBER OF UJAMAA VILLAGES

| Date | (1) No. of Villages | (2) Total Pop. in Villages | (3) Ave. Pop. Per Villager | (4) Total Pop. as % of National Total |
|----------|------------------------|-------------------------------|-------------------------------|--|
| Feb 1967 | 48 | 5,000 | 104 | 0.04 |
| Dec 1968 | 139 | 53,000 | 325 | 0.50 |
| Dec 1969 | 650 | 300,000 | 462 | 2.50 |
| Sep 1970 | 1,200 | 500,000 | 417 | 4.20 |

Source: Ellman, 1970, p. 2; column(3) by addition.

The figures used here include villages at all stages of Ujamaa development and at all levels of commitment to the policy. As may be seen in the table, the villages have not only increased in number, but also in size. In some areas, Ujamaas with as many as 1,000 families have been reported, although most often they do not exceed 200 families.

Another point regarding the expansion of the Ujamaa is the location of the villages. By the end of 1971, a vast majority of Ujamaa villages were located in the economically less developed areas of the country. Cliffe criticizes this strategy of new settlements, which he finds emphasizes "the provision of social facilities rather than the organization of cooperative production" (Cliffe, p. 15) which might provoke a confrontation with vested interests. How much of an impact these new and often isolated settlements will have on agricultural markets remains to be seen since most of them are barely surpassing subsistence levels of agriculture. What is needed, Cliffe contends, is "the necessity to face up to existing inequalities as well as the particular ecology. Specifically confrontation of the emerging class structure may involve the identification of any large farmers who may have to be expropriated, prevented from employing a regular labour force, be temporarily excluded from Ujamaa groups, or

at least eliminated from decision-making" (Cliffe, p. 16).

The point that needs to be made, then, is that if Ujamaa is to achieve its objective of improvement through equalization, expanding to cover the vast majority of the agricultural sector within a generation, specific policies and a special strategy for action must be devised quickly before resistance to the policy increases. The successful spread of the Ujamaa up to now represents merely a starting point. After all, only 4.2 percent of the national total population has joined Ujamaas, a low percentage when one considers that over 80 percent of the population of Tanzania depends on agriculture for a living.

With respect to agricultural output and income of members as a result of the Ujamaa policy, only scattered evidence exists, showing a general increase in both output and income. The two main factors that account for this are the clearing and incorporation of new lands into agricultural production, and the improvements in productivity due to the use of improved inputs. Kayombo, for example, reports that in Kerage Ujamaa Village, where 750 acres of plantation farming (cashewnut and coconut) were worked in the agricultural year 1968/69, 700 new acres with rice fields, sisim, and castor oil are being added to the production plan of the village in the 1969/70 agricultural year. Incomes, which in the period 68/69 averaged Shs. 700 per member are expected to increase to Shs. 800 in 1969/70, to Shs. 950 in 1970/71 and to Shs. 3,480 by 1973 when several new investments are in production. All these incomes refer only to communal activities. Therefore, results of individual crops must be added.

Figures, though, for production and income are still difficult to find, and will remain so for as long as Tanzanian agriculture remains close to subsistence levels where the producer is in turn the main consumer. An evaluation then, in terms of income and output, does not seem possible, or at least of much relevance at this stage in their agriculture.

GENERAL COMMENTS ON THE ASENTAMIENTOS AND THE UJAMAAS

A basic similarity in these two models is that both are in operation due to governmental action, as part of a policy intended to foster agricultural development. But, at the same time, they have three major differences: a) The Asentamiento is a compulsory organization which all those participating in the land reform must join. The Ujamaa, on the other hand, is a voluntary organization joined by members because of the benefits it can offer to them; b) The Asentamiento is a transitional form of organization, which after a period specified in the law--normally three years, maximum five years--gives way to a permanent form of organization which may be individual or cooperative. This resulting form will be closely associated with the type of land ownership assigned. The Ujamaa is a permanent form of organization, where ownership of land has no real significance; c) The Asentamiento is organized only on those lands affected by the land reform. It covers, therefore, only part of the agricultural sector and this only on a transitory basis. The Ujamaa is expected to encompass the vast majority of the agricultural sector. As a permanent organization,

its increment over time can be measured and easily analyzed. This is not possible with the Asentamiento, which should gradually terminate as a shift into permanent forms takes place.

In the area of politics, another difference can be found. While the Ujamaa relies heavily on TANU, and is an official party policy for agricultural development, the Asentamiento has no official political guidance. This does not mean that politics is absent on the Asentamiento. Quite the contrary, struggles for political influence (if not complete control) by the different political parties in Chile are no doubt a major issue today in the country. In spite of this, the Asentamiento as an institution is not politically committed to any party or group, and in turn, no party or group has among its official policies a commitment to the Asentamiento as the form of organization.

Another difference, related to the previous one, is the ideological background of these models. As already mentioned, the Ujamaa represents an ideologically motivated return to traditional African society. Nyerere has stated that Tanzania needs no lessons in socialism because that was its natural form of organization in precolonial days. Ideology, then, is a strong component with substantial weight in all facets of implementation of Ujamaa policy. On the other hand, the Asentamiento may be viewed as being in an ideological limbo. While there is no doubt that some ideological traces can be found, especially in regard to older models of cooperative farming, it can be stated that the Asentamiento is a much more pragmatic form of organization than an ideological one.

A final difference is the kind of situation from which the models emerge. In other words, the kind of system which precedes each model. The Asentamiento is always organized on expropriated farms, usually large, where peasants have normally been working within the framework of an organization with rather clearly stated working rules. Peasants are therefore used to working in groups and being directed on what to do and how to do it. In the Ujamaa, the situation is generally quite different. The Ujamaa has to group small, often fairly independent farmers, who, although part of a group or tribe, have been able to maintain their freedom of operation.

With respect to similarities, some important ones are the common elements found in the objectives of both organizations relating to increasing agricultural production, strengthening the communities, and in general committing themselves to the goals of socio-economic development. A particularly relevant similarity is the system of work and income distribution. In both models there is a wide range of variation with respect to the level of integration. Mixed forms--an individual plot and cooperative enterprises--seen widespread and well accepted. With respect to income, both systems follow the same principle of income distribution on communal production according to the total number of days worked through the year in the common enterprises.

In conclusion, it may be stated that these two models clearly show that every case is in itself unique. Common principles and practices evolve in the same way that differences emerge, each coming as a response to conditions that must be met.

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CHAPTER V: COMPARATIVE ANALYSIS AND CONCLUSIONS

ABOUT COOPERATIVE FARMING

A comparative analysis of different models of cooperative farming is a complex task due to the many variables which have influenced the outcome of each of them. There are political, sociological, ideological, economic and ecological factors which must be considered because of their influence on the institutional framework devised. In the same way that many different systems have been created by each nation engaged in cooperative farming, many different variations in that system are also found within each country. To clarify this one model will be examined: the Asentamiento.

While the Asentamiento is no doubt a Chilean institution created with a clearly defined purpose--that of transitional operation of land-reform-expropriated farms while final ownership and organization are being thought out--it is possible to find wide variations among the Asentamientos. Some are totally communal, some predominantly individual. There are those which may be considered "in-between," but here again there are differences according to which characteristic predominates. There is also a time factor. Not all of them will operate in the same way every year, especially due to the transitional nature of the organization. Changes on Asentamientos may be due to community or government decisions, and may be based on political, economic, or practical considerations. For instance, if the Asentamiento is working on a contract farming agreement, certain structural forms may be required. If that crop is not grown the following year, the whole internal organization may no longer be relevant. Now, if these variations can exist within one model, the issue becomes much more complex when comparing several models.

Another consideration which must be made when making a comparative analysis is the perspective it should have, and the expectations one has of the analysis. In this study, there are two things the reader must be aware of. One is the large number of variables, any one of which can make the outcome totally different. The second is the difficulty in determining which of these variables, internal or external, can be manipulated in order to improve cooperative performance and avoid past errors. Given the lack of experience in LDCs with cooperative forms of agricultural production, emphasis should be placed on the benefits of learning from the experience of other nations in order to develop a properly tailored and successful system of agricultural organization which will allow developing countries to meet their goals.

The following analytical model may be useful in this context:

- 1) Identification of a set of the most important variables;
- 2) Construction of a table indicating the manner in which the variable operates in each of the models;
- 3) Elaboration of a descriptive comparative analysis for the variables presented in the table, and explanation of the variations

found in them. Some conclusions can be advanced;

4) Presentation of a model of cooperative farming drawing from the different ideas discussed in the text.

1. Identification of Variables.

Several kinds of variables will be identified in order to know to what extent they influence performance. The first kind are those which can tell us something about the degree of autonomy of the organization, or in other words, those which can give some idea of where power is located in the organization. These variables include: a) membership (voluntary or controlled); b) production plan decisions (what is to be produced); c) who elects the manager (government or members); d) how is production organized (level of integration: individual or communal work); e) investment decisions (long-run capital investment).

The second kind of variables are those related to some of the activities which must be performed by the enterprise and which have some bearing on the results of the operation. These are: f) accounting (where are records kept and who is responsible for them); g) financing (what are the main sources of credit: government, private institutions, or the enterprise itself); h) marketing of the inputs (how they are purchased); i) marketing of the output (how sales are made); j) how is income of members determined (according to need, contribution of work to the common enterprise, or merely resulting largely from individual plots).

The third kind of variables are those which do not form a defined group but which provide additional information. For example, the estimated flexibility of each of the models to adjust to socio-economic change is important.

2. Table.

Table No. 5 shows the interaction among variables in various cooperative models presented here and in the Galeski paper.

3. Comparative Analysis of Variables.

a) Membership. In all cases there is some type of restriction to entry. Applications must be accepted either by the government, the general assembly of members, or both. A trial period for the applicant is common. Ability to leave the production cooperative has more variations. Basically (in all cases except the Kolkhoz) members can leave the organization whenever they please if they are willing to give up what they may have in the enterprise. On the Asentamiento, a transitory organization, members do not have permanent rights. Thus they are more free to leave. If they want to return, however, they must be accepted by the General Assembly. On the Ujama, exit and entry are free and normally some internal regulations will exist.

TABLE No. 5

Comparative Analysis

| | Membership | Production Plan Decisions | Manager Election | Production Organization | Investment Decisions | Accounting | Financing | Input Purchases | Output Sales | Income Determination | Flexibility to Adjust |
|-----------------|----------------|---------------------------|------------------|-------------------------|----------------------|------------|-----------|-----------------|--------------|----------------------|-----------------------|
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) |
| 1. Kibbutz | v | III | III | III | F/C | F | B/S | III | III | A | 3 |
| 2. Moshav | c ₂ | II | III | II | F | F | B/S | III | III | P | 1 |
| 3. Ejido | c ₂ | II | III | III/I | C | C | B | II | II | X | 1 |
| 4. Kolkhoz | c ₁ | II/I | II/I | II | O | C | G | II | II | X | 1 |
| 5. Asentamiento | v | III/I | III/I | II | O | O | G | III | III/II | X | 2 |
| 6. Ujamaa | v | III | II | II | C | C | G | II/I | II | X | 2 |

| | | | |
|---------------------------------------|-----------------------|-------------------------------------|-----------------------------|
| Column a | Col. b,c | Col. d,h,i | Col. e,f |
| v- voluntary | I- Imposed | I- Individual | F- In the farm |
| c ₁ -controlled by Gov't | II- Shared Decision | Predominates | C- Farm and outside control |
| c ₂ -controlled by members | III-Internal Decision | II- Mixed: Individ. and coop. forms | O- Outside farm |
| | | III-All coop | |

| | | |
|------------------|---------------------------------------|---------------------|
| Col. g | Col. j | Col. k |
| G- Government | A- According to needs | 1- Poor flexibility |
| B- Banks | W- According to days work | 2- Medium flex. |
| S- Other sources | P- According to individual production | 3- High flexibility |
| | X- W and P | |



b and c) Production Decisions and Election of the Manager.

Conditions vary, from decisions imposed from the outside by whatever agency is responsible for supervising production cooperatives, to the completely independent decision typical of any autonomous enterprise. Depending on variations within the system, any of the three categories may be found. On the Asentamiento, for example, production decisions depend to some extent on the ability for self-management in the organization. An attempt was made, based on this ability, to increase the degree of autonomy of some of the Asentamientos, thus freeing scarce personnel to look after newly established settlements. In 1968, in the Santiago Zone of CORA (Chile), four categories were developed among the Asentamientos: 1) those with good human and physical resource base; 2) those with good human resources but poor or frail physical resources; 3) those with poor or fair human resources and good physical resources; and 4) those with both poor human and physical resources. By good human resources was meant a peasant community with strong leadership, reasonable harmony, and sufficient motivation to make necessary management decisions for successful operation of the enterprise. By good physical resources was meant the potential of the farm as a productive and profitable enterprise. The idea discussed at that time was the possibility of giving the maximum degree of autonomy to all the Asentamientos falling in the first two categories. They would be provided with assistance and guidance through the preparation and later financing of their production plan. It was expected that these Asentamientos would be in a position to utilize private sources of credit, often working through contract-farming. The two latter categories would continue under the close supervision of CORA officials with intensified training programs for the peasant community. Although the idea was not implemented, mainly due to a political decision in the central office of CORA, the idea is worth mentioning because it shows the kinds of ways in which a growing cooperative farming sector can be organized and assisted when there is a lack of trained personnel. There has to be, however, a true commitment to transfer the power to the peasants and allow them their autonomy.

d, h & i) Production Organization and Marketing. A good understanding of the way in which these variables operate can be obtained from the Table.

e & f) Investment Decisions and Accounting. These two variables refer to the decisions for long-run capital investment and the way in which accounting is handled. The three categories in the table indicate they can be made on the farm, on the farm with outside control, and completely outside the farm, that is, by whatever agency is in charge of controlling the system. Looking at the table, the variations are clear. A special comment must be made on accounting because of its importance to the success of the enterprise. The Asentamiento is the only model where accounting is completely controlled outside the farm. This situation has greatly impaired the system. Members usually do not know exactly how they stand at the end of the year, resulting in insecurity, lower motivation and often many credit difficulties. This makes the variable a crucial one needing to be correctly handled for successful organizational results. A final comment on both of these variables is to call attention to the importance they have in developing involvement and a true sense of belonging to the organization. If both of

these variables are handled outside of the organizational framework by an outside agency, these goals will not be achieved.

g) Financing of Farm Operations. This variable deals with the yearly financing of the production plan. The main sources for it are: 1) Government agencies responsible for production cooperatives. 2) Banks, private or state-owned, both of which normally operate according to banking business principles which in many cases may mean relatively poor access to credit by small farmers. 3) Other sources such as internal funds, credits granted by suppliers, or advances for crops.

In many cases these three sources will be used, but commonly one of these channels predominates. The use of bank credit and that from other sources frequently (but not always) has a stimulating effect on production by helping to develop responsibility of members, especially if they have participated in making the financial decisions. This is due mainly to the stricter regulations and supervision imposed by those two sources as compared to government agencies which commonly avoid taking unpopular measures, something peasants normally understand well.

For example to a large extent, poor repayment of credits on Asentamientos can be blamed on accounting delays, because peasants will not channel funds through COLA (identified here with the government) without knowing their debt situation. This financing problem can often be mentioned as a reason for gradual de-collectivization of work in cooperative farming, because individual operations are much easier to handle in terms of immediate receipt of income by the members. The paramount importance of financing and accounting in production cooperatives must therefore be clearly understood.

j) Income Determination. The point here is to emphasize the importance of the remuneration system for improving performance and productivity. Whenever a mixed production organization exists (communal and individual), special incentives must be built into the communal sources of income to avoid member concentration on individual production, thus neglecting communal enterprises.

k) Flexibility to Adjust. The first question that arises with this variable is: adjustment to what? The answer is adjustment to whatever challenge the system faces. Initially it may be the ability to provide more employment. Later it may be the need to release labor. Another common adjustment required involves changes to ensure that the system will grow. Flexibility to adjust means, therefore, adapting to the general socio-economic environment in which the organization must operate. Flexibility has often been mentioned as one of the reasons for advocating cooperative farming, making its importance apparent.

4. A Model of Cooperative Farming

The following assumptions will be at the basis of our model:

First, it will be assumed that the cooperative farming enterprise is being created in a developing nation with a large peasant sector.

Second, it will be assumed that the system is promoted by a special-

ized agency, either private or governmental. Third, that the system is initiated on a previously existing large farm sector either by expropriation of estates via a land reform program or by colonization of new lands. Beneficiaries of this program--cooperative farming members--will generally have a background as farm workers, either as sharecroppers, small tenants, or wage workers, most of whom have never previously owned land.

1. Goals. First are those geared to the satisfaction of the members' needs; e.g., a) to improve the level of income of the members and b) to improve the general level of living of the members and their families. Second are goals of the enterprise as such, and as it relates to the society; e.g., a) to make the most efficient use of resources in order to achieve all enterprise objectives b) to increase food production c) to make the increased production available to the population (especially urban) d) to increase employment opportunities e) when necessary, to allow labor release to meet industrial requirements.

2. Membership. There must be clear mechanisms regarding qualifications for membership, with flexible but clear provisions for entry and exit to and from the enterprise as general socio-economic conditions change. This is important to avoid organizational rigidity which may hinder the enterprise and prevent the accomplishment of some of its goals.

3. Decision-making Process. Power will be centered in the general assembly of members who will operate under democratic procedures of majority control. Formulation of objectives and general policy guidelines to achieve them will have to be approved by the general assembly. So too will the yearly production plan, any major adjustments that must be made to it in mid-course, and all major investments. The general assembly will also elect a management committee and a manager if necessary, as well as all other committees deemed useful for the operation of the enterprise. Full authority and responsibility for carrying out policy decisions will be granted to the management committee.

4. Land Use and Control. Land use will be the responsibility of the management board (or committee) in accordance with the approved production plan. This plan may, however, be influenced by regional or national guidelines coming out of the responsible agencies, in which production decision-making will be shared between cooperative farming members and the corresponding agencies. This shared decision-making may also occur between the enterprise and credit institutions.

5. Capital Structure. The capital structure will depend on the availability of resources to the enterprise and should be specified in the production plan. Priority will be given to the fullest possible profitable use of labor. Two categories of credit will be recognized: A short-run credit maximum to be subscribed by the management board, and long-run investment credits which include all those above the maximum and which must be approved by the general assembly.

6. Financing. Cooperative farms should be encouraged to use more than one source of credit in order to help reduce dependence which might develop when only one credit source is used, help the enterprise acquire more flexibility of operations, and eventually more responsibility.

The mechanisms used by financial institutions assisting a cooperative farming sector should be based on the farms' production plans and geared to help their fulfillment. This, of course, will depend on the ability of these institutions to have appropriate supervision of farm operations. Assuring they do have the personnel to do so, then loans should be disbursed according to progress made in production. A simple but accurate cash flow of the yearly operation should be maintained to know precisely when funds are needed and when they can be repaid. This commitment of the enterprise should be known to members so they feel the need for effective performance if the enterprise is to succeed. This is the only way members will be able to meet their expectation and achieve their goals.

Among credit mechanisms, probably one of the most successful is one which initially provides inputs required for the crops to be planted, and later a cash advance per unit of land being cultivated. This advance may be divided into two or more installments depending on the crop. Its prerequisite is the verification of the condition of the crop. Inputs and cash may also be provided by different sources, and the enterprise should be in a position to opt for the most advantageous combination.

At this point, emphasis must be placed on the need for an up-to-date and efficient accounting system if a credit system of this sort is implemented. A failure in accounting may jeopardize the whole operation.

7. Organization of Production and Labor. The best possible system to assure full participation should be adopted. According to types and number of agricultural enterprises included in the production plan, committees may be created when their function is seen as a contribution to better organizing work and fixing responsibility. Incentive mechanisms should be incorporated into the general organizational framework together with specifications regarding work assignment methods and labor specialization. Crops should be predominantly cooperative and represent the main source of income to members so as to ensure their full dedication and participation.

If production is cooperative in nature, then the way in which labor is to be organized becomes a crucial element. Brigades, work teams, and specialized workers are some of the devices commonly used depending on the size of the farm and the type and magnitude of the agricultural enterprise. Responsibility for brigades and work teams should be assigned to members with leadership abilities and other qualifications to perform the tasks. Whenever possible, these designations should be made by the general assembly as a way to foster member involvement. The management committee, however, must have sufficient leeway to make designations or delegate the authority it deems necessary for more efficient operation of the enterprise.

Job assignments should meet two sometimes contradictory conditions: one, the development of a certain degree of labor specialization; and second, job rotation to provide members with the opportunity to learn different jobs and also to work with each other. Work rotation also has merit in terms of equalization, because all members eventually do all the different jobs. This prevents to some extent the emergence of "bosses" which can lead to conflict and abuses.

When specialized teams are organized, direction need not necessarily always be in the hands of those with greater technical expertise. However, specialists should always participate in teaching others so as to improve the level of efficiency of fellow-workers.

Finally, one needs to mention the advisability of elaborating norms when different tasks are to be performed throughout the year and the labor requirements for them. This will contribute to timely performance of the operations on the farm.

8. Income Determination. The income level desired for members has to be stated at the onset in order to produce a production plan appropriate to achieve this stated amount. If this is not possible after careful analysis of enterprises and their estimated returns, an adjustment of the income goal must be made. Later, some investment programs may be planned to allow future higher income to members closer to initial expectations. This hoped-for level of income should, of course, be adjusted to national and local standards for similar jobs so it represents a realistic objective.

The way in which income will be distributed has to be clearly stated at the beginning of the enterprise (see Chapter III). It is apparent from the models discussed (and those found in the Appendix) that a combination of income from communal enterprises--distributed according to days of work--plus income coming from some individual production is a widespread practice. A correct balance of these forms is essential to avoid poor performance on communal enterprises. If no more than 25 to 30 percent of total income derives from individual production, members will maintain their interest in communal enterprises. In any event, incentives must be built into the system to assure full participation. If a different form of work organization is adopted and a larger percentage of income is to come from individual production, incentives become even more relevant. If production is organized in such a way that income of members will come predominantly from individual production, then specific working rules must be enacted to assure the efficient operation of communal ventures, because their failure will contribute to the gradual and increasing de-cooperativization of the organization.

9. Flexibility to Adjust. Since some elaboration on this point has already been made, only a brief comment emphasizing the need to consider this point is necessary. Effective mechanisms for reevaluating the institutional framework of the organization are necessary. Mechanisms might include adoption of new basic policies or changing old ones by a two-thirds or three-fourths majority vote. It also might mean the ability to change the conditions regulating entry or exit to or from the organization, or changing regulations which determine rights to land and participation in work, things which today are responsible in large part for the rigidity in some of the models discussed and which are commonly mentioned as some of the reasons for their poor performance.

10. Incentives. Probably one of the most often discussed and certainly one of the most important issues in cooperative farming as well as in other enterprises is the matter of incentives (See Chapter II).

Incentives are mechanisms motivating people to action to help them satisfy their needs and achieve their goals. The types of incentives used will be dependent on the needs and on the perception members have with respect to ways in which these needs may be satisfied. As a result of these new concepts, the use of moral incentives has gradually grown in importance, often predominating in socialist countries and also increasing in affluent societies.

The types of incentives more relevant to cooperative farming will now be discussed. Several times throughout this study a general assertion has been made about the need to build into the organizational framework a "balanced system of incentives." What is the meaning of this concept? Simply stated, it means the use of both moral and economic incentives to motivate members of production cooperatives. While the importance of moral incentives is recognized and heartily embraced, economic incentives no doubt represent an extremely valuable mechanism for promoting improvements in performance. This is so mainly because a minimum income and standard of living is basic to the use of moral incentives. Stated in other words, it is irrelevant to speak of moral incentives to people who are starving, have no security and an obscure future which often they would rather ignore.

Economic Incentives. This usually refers to remuneration for work performed, over and above a certain standard or norm. The importance of a gradual development of standards and norms on each farm was mentioned in Chapter III and it will be in relation to these specially developed norms that incentives can operate.

To develop a wage incentive plan four things need to be considered: units of output, standard time, time effectively worked, and time saved. From these, two main categories of economic incentives may be derived: piece rates and time bonuses. In farming several mechanisms can be worked out. In potato harvesting, for example, one mechanism is to set a price per bushel harvested. Another is to set a bonus for every bushel harvested above a certain minimum norm stated for a day's work. Still another mechanism is to set a time period for harvesting a given number of bushels. If harvested in less time the worker can either leave when he has completed his quota, or continue working with extra pay, either per time unit or per volume of output harvested.

In livestock enterprises, a common practice is to pay a bonus according to the type and size of the herd. In sheep raising, for example, a bonus per lamb born and/or marketed may be paid. Additional bonus payments can be made according to the yields of wool per sheep, and shearing is frequently paid per animal.

Sometimes incentives are paid to the individuals. Other times group incentive rates may be distributed among members of the group. Besides time bonuses or piece rates, group incentives can take other forms such as profit sharing. This is possible when one has labor specialization, permanent work teams or brigades, a good system of cost accounting, and tasks which can be organized to allow most members to operate under similar conditions. This latter point is important, because if only part of the members of the production cooperative are working under incentive mechanisms, those who are not may consider they are being dis-

criminated against, besides normally getting lower incomes. The need to avoid this situation is probably one of the reasons behind the widespread use of profit distribution according to days worked in addition to a base wage or advance, something which does not, however, represent an automatic incentive to productivity.

There are some systems geared to solve the problem of incentives for those who are not working directly on a measurable task. One alternative is higher wages for those who cannot be easily incorporated into incentive devices (this technique is in wide use on some Czechoslovakian cooperative farms). Group incentives with a percentage (15 to 25 percent) to be allocated among those performing supporting tasks is another alternative.

The following guidelines should be considered when choosing an incentive plan: a) The plans must be simple, understandable and easy to calculate, especially by those who will be working with it; b) Earnings should vary directly with increases in output and efficiency; c) Incentive payments should be made as quickly as possible; d) Work standards relevant to each organization must be developed through systematic study of internal conditions and potential; e) Incentive rates should be guaranteed against change unless changes occur in the methods or materials employed; f) A base wage or advance should be guaranteed regardless of daily output, assuming there is a reasonable work performance by the workers; and g) There should be a sufficiently large spread (30-40 percent above common earnings) between the base wage, or advance, and the incentive earnings so as to stimulate more than normal effort by workers.

The use of economic incentive plans is something which should be carefully planned and evaluated because of their potential for hampering internal relations. It must also be considered that incentive plans are usually expensive to carry out due to the administrative costs involved in detailed keeping of records for payment--another reason why their use must be approached with caution and appropriately balanced with moral incentives.

Moral Incentives. These include information, participation, praise and delegation of responsibility.

Cooperative farming is an organizational form which can make use of some of these devices. Information and participation are two elements which have already been emphasized because of their importance in developing a sense of belonging as well as forming the basis for membership decision-making. The suggested use of committees, brigades, work teams and work rotation all delegate real responsibility to the member. Praise and punishment, by means of an election of the best and worst worker, is a type of incentive widely used in socialist Cuba today. Certificates of achievement to highly productive workers have been a device used for many years all over the world.

In general, moral incentives are geared to develop a commitment to the organization to which people belong. If this commitment is translated into higher efficiency and productivity, then the goals of the

organization and its members in the best possible way.

Some Additional Considerations. The ten variables just discussed no doubt represent the most important points that need to be taken into account when a cooperative farming system is being created. There are, however, a few additional elements worth taking into consideration.

a) Some Internal Operating Procedures. Work organization and coordination should be done by the management board and those to whom authority is delegated. A special control committee may be set up to evaluate progress and performance, reporting to the management board and to the general assembly, and meeting at least four times a year. A feedback mechanism between management and members should be devised in order to make timely adjustments. Annual elections of officials should be held (at least partial replacement). Committee members responsible for specific tasks should be elected more often to foster participation and responsibility. The process of hiring a manager--if this is decided instead of working mainly through the management board--needs to be known and approved by the general assembly. This is especially important since the manager will most likely be an outsider with some special training for the job.

b) Some External Operating Procedures. Every organization should have official representatives for its external activities. While commonly this work is part of the responsibility of the manager and the members of the executive committee of the management board (president, secretary and treasurer) other members can also be appointed if they have special skills for the job (such as financial and marketing skills). Marketing should be given special importance due to the weight it has on the final outcome of the enterprise. Whenever possible and convenient, production cooperatives should be actively involved in activities of service type cooperatives (credit, insurance, marketing).

c) Back-up Mechanisms. These will be mainly the responsibility of the agency in charge of the promotion of a cooperative farming system, and should provide strong support for the different enterprises being created, assisting them in whatever needs they may have in their take-off stage, and later during their normal operations. A long-run perspective should also be kept by the assisting agencies in choosing which projects to support.

Concluding Remarks. One point needs to be emphasized before completing the model. It concerns the importance that management has in the success of the cooperative enterprise. The model thus far has spelled out the more important variables that need to be handled as well as other issues to be considered, but in the final analysis it is the capability of management which determines whether or not these variables are correctly handled to lead the cooperative farming enterprise along the road to success. Management in this context may either be provided by group action--the management board--or by an individual--the manager. In both cases there must be special understanding by management of the alternatives in each unique situation in order to select the best course of action for the organization to achieve its goals.

APPENDIX

Survey of Different Forms of
Cooperative Production in Agriculture*

The intention of the appendix is to provide readers with a more detailed explanation of some of the cooperative farming forms which are cited throughout the text, and at the same time show the many variations which are found among agricultural production cooperatives existing in the world.

The same type of information for each of the forms will be provided wherever possible and according to the sources of information available. Two elements for a classification of these forms are included for each cooperative. The first element is the location of decision-making, which is classified according to the type of management (centralized management, shared management and self-management). The second classification is based on the level of integration of productive resources, which fall into three categories. Category I is the loosest form and only some means of production are integrated, and Category III is the highest form where all the means of production are integrated into the cooperative enterprise.

*Credit must be given for the decision to elaborate this Appendix to my friend and office companion, Mr. Burt Swanson, who suggested this when commenting on the early drafts of my research.

CATEGORY I

Partial Integration

Name: Polish Type I Cooperative Farm

Country: Poland Year of Creation: approximately 1950

Location of Decision-Making: on members

Description: The member maintains the individual control of his means of production and carries out cooperatively only some tasks and activities. The product is sold individually by the farmers and this provides their income.

Bibliographical Sources: Boguslaw Galeski, in P. M. Worsley (ed.)

Name: UAC I (Unified Agricultural Cooperatives)

Country: Czechoslovakia Year of Creation: 1949

Location of Decision-Making: mainly on members

Description: Only some activities are done cooperatively, such as sowing or planting. The member retains the majority of his land, livestock, and equipment. This type of arrangement normally is considered as neighborly help on a cooperative basis.

Bibliographical Sources: Trnka and Hach, 1967

Name: Ujaama

Country: Tanzania

Year of Creation: 1967

Location of Decision-Making: on members, sometimes shared with government agencies

Description: This form has wide variations depending on the level of integration. Members can work most of their land individually, or they can work it in a completely communal or cooperative form, their sources of income depending on the form adopted.

Bibliographical Sources: See Chapter 4 of this work

Name: Cooperative Better Farming Society

Country: India

Year of Creation: *

Location of Decision-Making: on members

Description: It is a form with varying degrees of integration and activities. Members will engage in only some activities which they will work jointly. Members are, however, independent for all their other activities. The organization will mainly provide services for marketing (inputs and output) and cooperative production will not be the common case.

Bibliographical Sources: G. R. Madan, 1961

* Date not specified in source reviewed.

Name: GIE (Groupement d'Interet Economique)

Country: France

Year of Creation: 1967

Location of Decision-Making: on members

Description: It is a rather loose type of cooperative organization created in order to specialize in one particular area, e.g., research, sales, packing, exporting. Members therefore associate themselves mainly for one of these activities, remaining very independent in all the rest. There are few formalities for the creation of the GIE. Members have to number at least 12, farmers or not, and the enterprise will have a civil or commercial character according to its activities. A social capital is not required for the creation of the enterprise and all the conditions under which it will operate will be stipulated in a special document subscribed to by all members.

Bibliographical Sources: Options Méditerranéennes, avril 1971

Name: Société Civile d'Exploitation Agricole

Country: France

Year of Creation: *

Location of Decision-Making: on members

Description: It is a society organized with the purpose of rendering different kinds of services to its members, ranging from common production to processing and selling. Its form is rather loose and non-farmer members are also allowed. The society will usually be created for a determined period of years and will have a specified volume of assets.

Bibliographical Sources: Options Méditerranéennes, avril 1971

* Date not specified in sources reviewed.

Name: Moshav-ovdim

Country: Israel

Year of Creation: approx. 1904

Duration: still operating

Location of Decision-Making: on the members

Description: It is a settlement where land is individually worked by the members who belong to a multi-purpose cooperative society through which all marketing is done. Planning of the crops for all the village settlement is worked out by the cooperative society and approved by the general assembly of members. Besides individual cultivation of land there are also cooperative exploitations, commonly fruit orchards, poultry, or processing industries attached to the Moshavim.

Bibliographical Sources: Mordecai Kreinin, 1964; Maxwell Klayman, 1969; Weintraub, Lissak and Azmon, 1969; Effraim Orni, 1963; Eduardo Bastos, 1971

Name: LPG I (Landwirtschaftliche Produktions-Genossenschaft)

Country: Eastern Germany

Year of Creation: approx. 1952

Duration: still operating

Location of Decision-Making: on the members

Description: Only the cropland is contributed to the cooperative society for joint use while garden and forest-land as well as grassland remains in individual use. Livestock, including draught animals, and the dead inventory (machinery, tools, and implements) remain the property of the members who are paid for their use in the cooperative society.

Bibliographical Sources: Konrad Merkel, in U. A. D. Jackson (ed.), p. 222; Otto Schiller, 1969, pp. 209-211.

Name: TOZ or TOZY (Association for the joint cultivation of land)

Country: Soviet Russia Year of Creation: approx. 1926

Duration: approx. 1930

Location of Decision-Making: on the members

Description: It was the loosest type of production cooperative, often viewed as a transitional form. Only land was worked jointly. All other agricultural means of production--draught animals and other livestock, and the tools and implements--continued to be used individually.

Bibliographical Sources: Alex Nove, "The Decision to Collectivize," and Otto Schiller, "Communist Experience and its Implications for Developing Countries." Both in W. A. D. Jackson (ed.), Agrarian Policies and Problems in Communist and Non-Communist Countries. Seattle: University of Washington Press, 1971

CATEGORY II

Medium Integration

Name: Polish Type II Cooperative Farm

Country: Poland Year of Creation: approx. 1950

Location of Decision-Making: mainly on members

Description: All the land is pooled together for common cultivation, except for garden plots of members. Income is distributed according to the proportion of work done and to the contributions of land and capital.

Bibliographical Sources: Boguslaw Galeski, in P. M. Worsley, (ed.)

Name: Cooperativas Agrícolas de Produccion

Country: Spain Year of Creation: approx. 1960

Location of Decision-Making: on the members

Description: These cooperatives are generally of relatively large size (50 to 30 members and 800 to 1,000 Has.), especially relative to the French GAECs. Members' income will usually be distributed according to the work, land, and capital they have contributed to the cooperative venture.

Bibliographical Sources: OECD, 1972

Name: UAC II (Unified Agricultural Cooperative)

Country: Czechoslovakia Year of Creation: 1949

Location of Decision-Making: mainly on members

Description: Members develop a common crop rotation and perform a large number of operations cooperatively. Crops are divided according to the acreage contributed by the member to the cooperative. Work done is remunerated according to labor norms taking into consideration the difficulty of the job. Animal production is retained on an individual basis.

Bibliographical Sources: Trnka and Hach, 1967

Name: Communes

Country: Mainland China Year of Creation: 1958

Location of Decision-Making: shared by members and government

Description: The Commune is a basic economic, social, and political entity in the rural areas, which owns all--or most--of the means of production. It is an integration of agriculture, industry, and administrative responsibilities, all in one organization. Work is done cooperatively, usually by production brigades. There is an emphasis on labor specialization, and general education of workers. The income to members varies according to the Commune and the activities that take place in it. Normally, after several deductions, between 50 and 70 percent of the total income will be distributed to the members according to the days worked in the cooperative enterprise.

Bibliographical Sources: Kang Chao, 1970; Paul Pickowicz, The Progressive, January 1972

Name: Cooperative Tenant Farming Societies

Country: India Year of Creation: **

Location of Decision-Making: on members

Description: The society gets the land on lease and then allocates it to members on an individual holding basis. The whole land is cultivated according to a production plan laid down by the society, which will provide members with credit, seeds, manure and farm equipment, if necessary. It will also handle the marketing of the members' output. Each tenant pays a fixed rent for his holding, the produce of it being his own and at his complete disposal. Profits of the society after paying for all expenses and allowing for a reserve fund are distributed among the tenant members in proportion to the rent they paid.

Bibliographical Sources: G. R. Madan, 1961

Name: Cooperative Joint Farming Society

Country: India Year of Creation: **

Location of Decision-Making: on members

Description: It is a society usually formed by small size owners. They agree to pool their land and work it as a whole. Members work in the tasks assigned by a special committee they have elected and receive wages for their daily work. They will also receive a dividend payment in proportion to the value of their land contributed to the society. The profits of the enterprise (after all payments have been made) will be distributed among the members according to their days of work after providing for a reserve fund.

Bibliographical Sources: G. R. Madan, 1961

** Date not specified in sources reviewed.

Name: CAC (Cooperative Agricole Civile)

Country: France

Year of Creation: 1959

Location of Decision-Making: on members

Description: This is a society associated according to the regulations of the French cooperative movement. The organization must have a minimum of seven members and no maximum is stipulated. Its activities and level of integration will vary according to members' decisions and needs to be met. It will vary from production in common, to processing, selling, etc. The cooperative will handle only products of its members, and those joining have to make a commitment to operate through the cooperative. The distribution of net savings or income will be determined by the General Assembly of each of the cooperatives.

Bibliographical Sources: Options Méditerranéennes, avril 1971

Name: GFA (Groupement Foncier Agricole)

Country: France

Year of Creation: 1970

Location of Decision-Making: on members

Description: It is a type of civil society created to operate or maintain one or more farms. While legal registration is not fully required they must operate according to a set of regulations. Members do not necessarily have to work the land directly and it may even be leased if the group so decides. The GFA has a minimum duration once created of nine years, and there is no size limit. Members' contributions can be in land, equipment capital, or all of those. The system is quite new and there is not yet much experience with its operation.

Bibliographical Sources: Options Méditerranéennes, avril 1971

Name: GAEC (Groupement Agricole d'Exploitation en Commun)

Country: France Year of Creation: 1962

Location of Decision-Making: on members

Description: All the members agree to contribute their land to the enterprise and operate it under joint management. All the members have to work directly in the tasks assigned and labor hired by the joint enterprise in limited numbers may also be employed. The group should not be larger than 10 members, most of them contributing family type enterprises. Integration of land is normally complete but it will range in some of the other types of agricultural enterprises (livestock, poultry). The societies have to be legally registered. Members' income will come from wages for the work performed, plus a proportion of profits according to the land and capital contributed to the society.

Bibliographical Sources: Options Méditerranéennes, avril 1971; OECD, 1972.

Name: Ejido

Country: Mexico Year of Creation: 1915

Duration: still operating

Location of Decision-Making: usually shared due to credit regulations

Description: Two forms can be found: the collective and the individual Ejido. They represent two different organizations where for the most part, land is worked in a cooperative or collective fashion as one unit, or where the majority of land is individually exploited. Land is owned by the State and is assigned to the ejidatarios with the condition that it cannot be sold, mortgaged, leased, or divided. Members who do not cultivate their land directly for two years may lose their rights, which are re-assigned by the Comisariado Ejidal to other applicants.

Bibliographical Sources: Salomon Eckstein, 1966; Raymond Wilkie, 1971; Juan Ballesteros Porta, 1964; Elyer Simpson, 1940; Hugo Tulio Melendez, 1965.

Name: Kolkhoz

Country: Soviet Union

Year of Creation: 1929

Duration: still operating

Location of Decision-Making: shared between members and the State, the latter predominating

Description: It is an agricultural organization where the land is owned by the State and peasants only have its usufruct. Organization varies, but generally it is cooperatively organized. The workers receive an advance or a base wage, depending on the results of the enterprise. A special characteristic of this form is the private plot that members maintain next to their houses and which not only represents an important source of income for them, but also represents an important source of food supply for all the nation.

Bibliographical Sources: Otto Schiller, 1969, pp. 182ff;
W. A. D. Jackson, *passim*;
A. N. Sakoff, 1968 and 1970.

Name: LPGII (Landwirtschaftliche Produktions-Genossenschaft)

Country: German Democratic Republic (Eastern Germany)

Year of Creation: approximately 1952

Location of Decision-Making: shared by members and government through planning devices

Description: The farmer brings into the cooperative enterprise his land plus his traction power machinery and implements. Livestock will usually remain with the farmer, who will also cultivate some additional land individually-- usually a small plot of no more than five acres.

Bibliographical Sources: Konrad Merkel, "The Agrarian Problem in Divided Germany," in W. A. D. Jackson (ed.), p. 222 (see references); also in Otto Schiller, 1969, pp. 209-211.

Name: Agrarian Circles

Country: Poland

Year of Creation: 1956

Duration: still operating

Location of Decision-making: shared between the government
and the farmer-members

Description: The agricultural circle is basically a government sponsored association of farmers who gather regionally to improve the level of technology of their exploitations. They purchase and operate farm machinery commonly. Services are provided to all farmers--with members getting theirs at reduced prices. The circle can be seen mainly as a service cooperative which allows improvements in yields by making new technology available. Financing of the organization comes from the Agricultural Development Fund of the government and member contributions. While mechanization is the main effort, irrigation, plant production, and shared action in processing plants is also undertaken.

Bibliographical Sources: Witold Lipski, Agriculture in Poland, Warsaw: Interpress Publishers, 1969; Arthur and Jan Adams, Men Versus the System, New York: The Free Press, 1971; Tomasz Wybraniec, "Peasant Farming in Poland: Performances and Prospects," paper presented at the Conference on Soviet and Peasant Affairs, August 1967, Seattle, Washington.

CATEGORY III

Total Integration

Name: UCP (Unités Cooperatives de Production)

Country: Tunisia Year of Creation: approx. 1965

Location of Decision-Making: members and government agencies

Description: The work is cooperatively organized according to a plan approved by the General Assembly of members. A management board and a President are elected to take responsibility for the daily operations of the enterprise. A Manager appointed by the Regional Union of Cooperatives assists the management board in the organization and managerial functions. The members' income is distributed according to days worked in the cooperative enterprises, and will depend on the year-end results of the organization.

Bibliographical Sources: Options Méditerranéennes, avril 1971

Name: Polish Type III Cooperative Farm

Country: Poland Year of Creation: approx. 1950

Location of Decision-Making: on members and government

Description: All the means of production are pooled for joint operation and management. Small garden plots are allowed. Income depends only on the work done and is distributed accordingly.

Bibliographical Sources: Boguslaw Galeski, in P. M. Worsley (ed.)

Name: Autogested Farms (Self-Management Farms)

Country: Algeria Year of Creation: 1962

Location of Decision-Making: on members sometimes shared
with government agencies.

Description: In this system all (or most) of the means of production are the property of the cooperative enterprise which works them under the principle of self-management (autogestion). The General Assembly of workers elects a Workers' Council which in turn elects a management committee responsible for the daily operations of the enterprise together with the manager. The latter is usually a government-appointed official who is, however, responsible for his work to the management committee and the Workers' Council. Members' income is composed of a basic daily wage plus end-of-the-year share of profits of the enterprise.

Bibliographical Sources: Thomas L. Blair, 1970; Eduardo Bastos, 1971.

Name: UAC III (Unified Agricultural Cooperative)

Country: Czechoslovakia Year of Creation: 1949

Location of Decision-Making: mainly on members

Description: The members contribute their main means of production to the cooperative enterprise, including their livestock. Ownership of land is retained and members are allowed a private plot and some back-yard livestock. Members' income is determined at the end of the year according to the results of the enterprise, and it is mainly distributed according to the work done through the year. The members will also receive some payment in kind (grain) and rent on the land they contributed to the cooperative.

Bibliographical Sources: Trnka and Hach, 1967

Name: UAC IV (Unified Agricultural Cooperative)

Country: Czechoslovakia Year of Creation: 1949

Location of Decision-Making: on members and the government

Description: All the means of production are cooperatively owned and operated. The members will receive an income based on the work done (number of days and type of work). Bonuses are added to the base wage according to the type of work performed.

Bibliographical Sources: Trnka and Hach, 1967

Name: Asentamiento

Country: Chile Year of Creation: 1965

Location of Decision-Making: on members, sometimes shared with the government

Description: The Asentamiento is a transitional organization created in Chilean land reform process to allow the exploitation of the expropriated land while ownership was being determined. Two types of exploitation were commonly found: the individual and the communal. The former was one where land was assigned to the members for their individual exploitation, thus becoming their main (or only) source of income. In the communal exploitation land was worked cooperatively and members' income was determined after profits and distributed according to the days of work of members during the year in the cooperative activities.

Bibliographical Sources: See Chapter 4 of this work.

Name: Cooperative Collective Farming Society

Country: India Year of Creation: *

Location of Decision-Making: on members

Description: The society holds the land and all other means of production. Cultivation is jointly done by all the members who receive a wage for their daily work. At the end of the year profits are determined after deducting all the payments and a reserve. Profit will be distributed among members in proportion to the wages earned by each of them during the year.

Bibliographical Sources: G. R. Madan, 1961

Name: SAIS (Sociedad Agricola de Interes Social)

Country: Peru Year of Creation: 1969

Location of Decision-Making: mainly on members with the advice of government officials

Description: These societies have been organized for the collective exploitation of lands mainly dedicated to livestock in the Peruvian sierras. The SAIS groups several farms and all the peasants living on them at the time of the land expropriation. The system is democratically managed by a General Assembly of Delegates formed by two delegates from each of the member-farms, and which is renewed by thirds every year. Members' income depends on the results of the enterprise and they receive some advances during the year.

Bibliographical Sources: Ministerio de Agricultura del Peru, 1970, 1971

* Date not specified in sources reviewed.

Name: Village Corporation (Empresa Agropecuaria Ejidal)

Country: Mexico

Year of Creation: 1963

Location of Decision-Making: principally in the Manager, but ultimately in the peasant members

Description: The system is based on Ejido lands with the special characteristic that a manager is hired to make most of the technical and administrative decisions. Members contribute their land to the common enterprise and will receive payment for it according to profits. During the year they work for a wage in the enterprise under the direction of the manager.

Bibliographical Sources: I. Haisman, 1971

Name: Kibbutz

Country: Israel

Year of Creation: approx. 1900

Location of Decision-Making: on members

Description: This is a totally communal society where the level of integration is complete. Everything but the land is owned by the Kibbutz enterprise which provides for all of its members' needs. These therefore do not receive income. Work is performed communally by the members according to a production plan approved by them in the General Assembly, the maximum organism of the enterprise.

Bibliographical Sources: Eduardo Bastos, 1971; E. Hachon, 1963; Weintraub, Lissak and Azmon, 1969; E. Orni, 1963; Otto Schiller, 1969.

Name: Moshav-shitufi

Country: Israel

Year of Creation: approx. 1936

Duration: still operating

Location of Decision-Making: on the members

Description: It is an agricultural settlement where all the work is organized on a communal basis, but members receive a personal or family income which they are free to spend according to their wishes. Families live in private houses and they hold the major responsibility for child care. Production is planned and approved by the General Assembly and all the operations are done communally based on one single organization.

Bibliographical Sources: Efraim Orni, 1963; Otto Schiller, 1969; Eduardo Bastos, 1971.

Name: LPG III

Country: German Democratic Republic (Eastern Germany)

Year of Creation: approximately 1952

Description: The members contribute all agricultural and forest lands to the cooperative society for joint use. They also contribute most of their livestock, equipment and implements. The member is only allowed to keep for free use up to 0.5 Ha. of land, mainly for vegetables and fruit. Livestock is restricted to no more than two cows with calves, two sows, and five sheep.

Bibliographical Sources: Konrad Merkel, in W. A. D. Jackson (ed.), p. 222; Otto Schiller, 1969, pp. 209-211.

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