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BASELINE STUDY: CUSG/AIFLD

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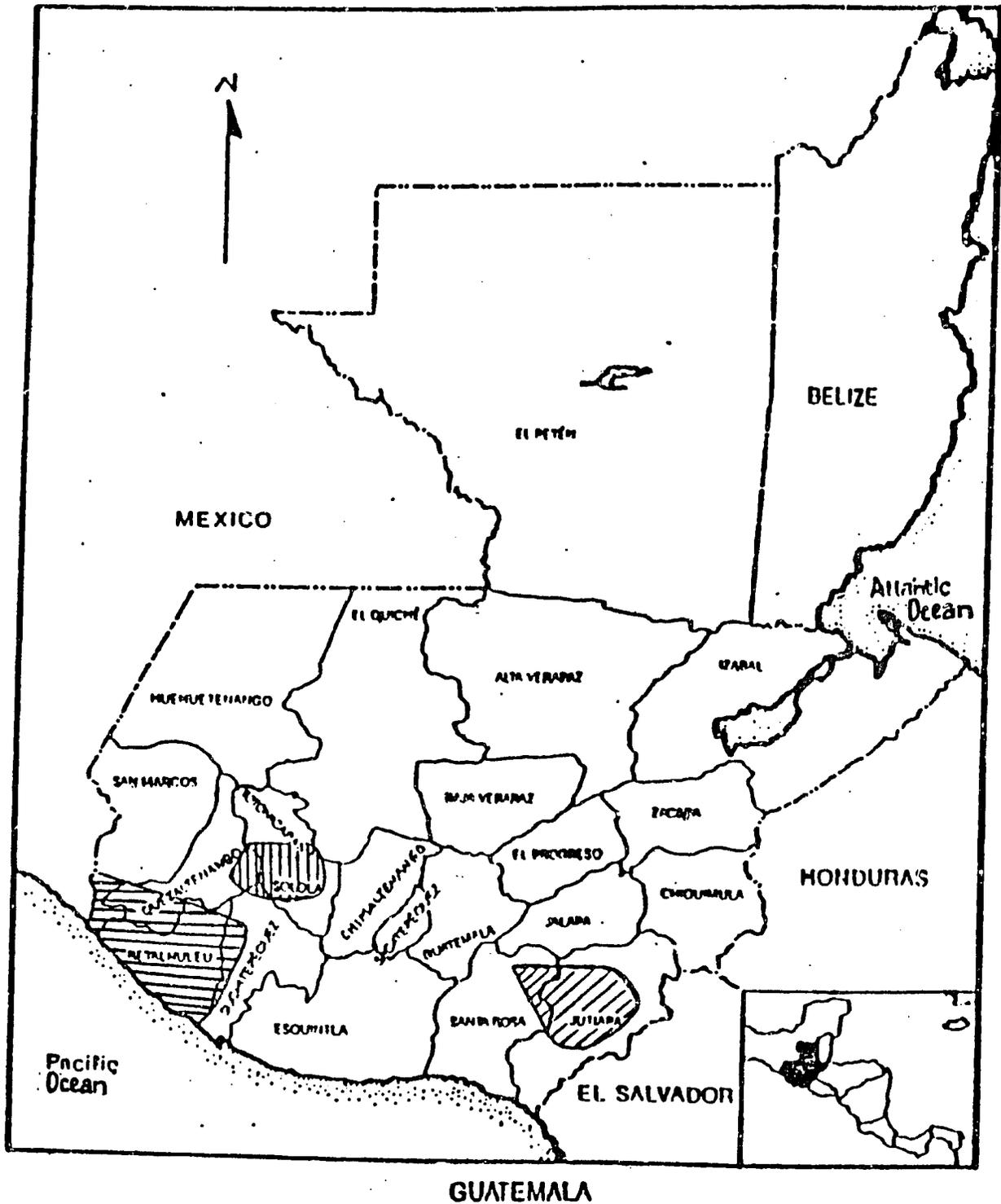
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REGIONS:

-  SOUTHERN COAST
-  WEST
-  EAST

EXECUTIVE SUMMARY

This baseline survey is the result of a joint study conducted by CUSG (Confederation de Unidad Sindical, or Confederation of Union Unity) and AIFLD (American Institute for Free Labor Development) among members of agricultural unions. The purpose of the study was to strengthen the socioeconomic projects of the Confederation and to describe the characteristics of the three regions which are potential project beneficiaries. We will therefore describe the scope, goals and components of the project and present a brief agronomic and socioeconomic profile.

The survey covered three regions in which, according to our investigations, the majority of agricultural unions are located:

- The eastern region includes the departments of Jutiapa, Jalapa, Santa Rosa and Chiquimula.
- The western highlands include the departments of Sololá, Totonicapán and Quetzaltenango.
- The southwestern region includes the southern part of the departments of Quetzaltenango, San Marcos, Suchitepequez and Retalhuleu.

In order to implement this study we held a series of meetings among the personnel of AIFLD, CUSG and the survey team. The scope of work required that the study cover three interrelated areas: agricultural, socioeconomic, and political. Each of these sub-investigations was to provide the quantitative and qualitative data which would prove most useful for the planning, implementation and evaluation of the project.

In consultation with the leadership of CUSG, the following fieldwork plan was developed: Six unions would be chosen from each region according to the established parameters. A minimum of eight members would be interviewed from each union, giving a total sample of 144. Eighteen communities were visited, covering a total of 19 unions. We were able to interview 146 members.

The following is a summary of the socioeconomic, agricultural and political studies.

I. Socioeconomic description of the Groups.

The average Guatemalan family consists of six people. Among those interviewed, the average size was seven people for the regions of the southern coast and the east, and six people for the western region.

Those interviewed, in general male heads of households, did not show a high level of illiteracy. However, only 2.73% of the total sample had schooling beyond primary. The majority of those interviewed who had attended school had not gone beyond third grade. Illiteracy, high dropout rates and complete lack of schooling were more prevalent in the eastern region.

The linguistic differences among the groups surveyed were characteristic of their regions. In the east 100% of the union members surveyed were Ladinos, who only spoke Spanish. In the west, a predominantly Indian area, 85% of those interviewed spoke Mayan languages. However, 80.6% could also function in Spanish; only 6.38% were completely monolingual.

The majority of members (80.43%) had always relied on agriculture as the principal source of subsistence and income, be it as small landowner, renter, working as sharecropper or as day laborer on a temporary basis. The lowest percentage of ownership of land was found on the southern coast (29%) and the highest in the east (37.34%). This reflects the current land tenure pattern.

On the southern coast farmers found additional sources of income in agriculture, generally as day laborers. In the west additional support came from handicrafts, commerce or employment as laborers. In the east there are few alternatives to agriculture and this is the region where the percentage of renters and sharecroppers was the highest (44.18%).

II. Agricultural Description of the Regions

The southern coastal region includes the departments of Escuintla, Suchitepequez, Retalhuleu and the lower areas of Quetzaltenango and San Marcos. In this region corn is the primary crop for small and medium-sized farms. It is followed in order of importance by sesame, sorghum, rice, and on a smaller scale, tomatoes, watermelon, peanuts, beans, soybeans, melons, bell peppers, cucumbers, bananas and plantains.

For planning purposes, the western region comprised the departments of Quetzaltenango and Totonicapán, but Sololá may be included. Given that corn predominates in the diet of the indigenous population of the highlands, this crop was most commonly found. However, with the typical horticultural production of this area, there is a degree of diversification which differentiates it from other regions. Among the different crops grown in the region one finds wheat, beans, and potatoes; vegetables such as carrots, beets, onions, cauliflower, lettuce, and beans; fruits such as pears and plums; and flowers such as wallflowers.

For the eastern region, the initial activities of the project will principally take place in Jutiapa, along with Santa Rosa and Jalapa. As in the other two regions, corn is the principal crop; in second place one finds beans and in third place sorghum. In general the planting in this zone is based on these three crops with interplanted corn and beans as the first crop and sorghum as the second. On a lesser scale one finds sesame, tomato, bell peppers, watermelon, melons, peanuts, cucumbers, radishes, coffee and papaya.

In the three regions surveyed, although not in equal proportion, the members do not cultivate only one plot. They usually, and sometimes must, farm additional plots. Two facts must be noted: a) the difference in the relative size of the plots worked among regions, and b) the necessity of working additional plots. In the southern coastal region the plots farmed by 61.69% of the members are between one and five manzanas (a manzana consists of 1.72 acres). Of these, 55.17% farm more than two manzanas of land. This is in strong contrast with the west, a region of extreme minifundismo (minuscule landholdings), which is continually exacerbated by further division of the land among the children. Here 86.96% of those interviewed own plots of less than a manzana. Of those, at least 55% own plots less than 0.2 manzanas. In the eastern region the situation is similar to that in the western: 85% of the farmers own plots of less than a manzana, but the distribution within this group is more uniform. Even so, 47.5% of those surveyed in the eastern region work plots of less than half a manzana.

It is not surprising that in the western region, because of the prevalent minifundismo, more than half of those interviewed (56.52%) felt it necessary to work additional land. In the eastern region the ratio is similar (47.5%), while on the southern coast, where at least 72.33% farm plots greater than a manzana, only 23.41% farm additional land.

As for the land tenure patterns of the areas farmed in 1988, those who own their own land, be it through inheritance or purchase, total 48.27% on the southern coast, 70.84% in the western region and 55.92% in the eastern. It is not surprising, therefore, that the percentage of rented land is greater in the southwestern region (37.41%).

The questionnaire revealed very limited use of non-traditional methods of agricultural production such as soil conservation, irrigation, or the use of pesticides, fertilizers or soil analysis; the highest use of these techniques is found in the eastern region, but they are usually tried out more on an empirical basis rather than based on sound technical knowledge.

Only 37.96% of those interviewed considered that the last harvest (1987) was adequate. The greatest dissatisfaction was in

the eastern region (68.08%), but in all three regions over half of those surveyed thought that the 1987 harvest was less than expected. Many different causes were mentioned and as a result there is no regional homogeneity. Given that most causes cited refer to weather, the eastern region would seem to be most sensitive to climatic changes.

The only negative factor mentioned almost uniformly in the three regions was the lack of fertilizers. Whether it is because of a lack of sufficient credit or because the farmers are not used to fertilizing, this factor had a considerable impact on the crops. In the western region, at least, almost a third of those interviewed mentioned the lack of fertilizers as a principal cause of low production.

The most critical step for the small producer is the marketing of his products, due principally to the intervention of local intermediaries in the marketing process. Of all the farmers surveyed, only a minimal percent expressed satisfaction with the amounts obtained from the sale of their products. The reasons, although expressed in different ways, are not mutually exclusive. Two are the most common: a) the intermediaries pay bad prices, and b) prices decline at harvest time and the income does not compensate for the investment. In reality, given the farmers' dependence on intermediaries, the second reason is a result of the first.

One of the main problems faced by the farmers when trying to obtain credit for production costs is their lack of knowledge, not only of those institutions granting credit, but of the terms on which it is granted. Apparently CUSG's practice of giving credit in terms of inputs presents fewer problems because of the terms; the credit is short-term, the quantities of inputs and the price to be paid are determined by the size of the plot farmed, and the interest rate is reasonable. However, even though the quantity of credit in inputs given by CUSG is based on the size of the plot, the inputs have been insufficient for the needs of those interviewed. Even so, this kind of credit is more convenient for the farmers than cash loans. The term stipulated for repayment is usually a maximum of 12 months. A repayment period corresponding to the harvest/marketing cycle (approximately six months) is offered as well. Apparently, at least during 1987, few of those interviewed found it impossible to pay their debt after harvest.

In 1988 CUSG has replaced BANDESA as a principal source of credit in these three regions. It is important to note that in the southern coastal region, even though it had the most credit available, 13.64% of the members had to use more than one source of credit in 1987 and 11.43% had to do so in 1988. Although the western region registered the lowest rise in use of credit in

general (8.52%), the rise in credit granted by CUSG was considerable in 1988 (46.91%).

According to the information obtained, one might say that the traditional crops which the farmer produces for his own use and for sale of the surplus are precisely those which produce the least profit and which usually generate losses instead of economic benefits. The causes mentioned above contribute to this situation, which could be corrected with properly planned technical assistance and credit.

III. Description of the Organization and Political Orientation of the Groups

Three of the objectives of the AIFLD/CUSG project stand out. They are to: 1. reinforce internal cohesion of CUSG and its capacity to function as a union; 2. improve its capacity in general to administer resources and services and to effectively represent the interest of its members; and 3. contribute to the democratic development of the nation so that the farmers know and can express their interest within a framework of democratic pluralism. These objectives require an adequate treatment of political matters, given that the unions have many characteristics which differentiate them substantially from other groups or associations. Generally the southern coastal region presents the highest level of knowledge about unions.

In general one can say that the expectations that the members have of the unions are high. They believe that their organization will provide such things as cooperation and help in the provision of credit, both in cash and in inputs; training in organizations and agriculture, and a significant increase in their level of general knowledge; a better standard of living; assistance in marketing their products, etc. On the other hand, even though the members realize the political, economic and administrative limitations which, directly or indirectly, affect CUSG and other unions, they place a high value on the role of these organizations.

We noted, however, certain disagreements about the work performed--or sometimes not performed--by the union leadership, the CUSG promoters and the Confederation itself in relation to the assistance, training and other activities of the unions. In this sense it may be argued that the aid has been insufficient and that there are too many unfulfilled promises. It is important to note that, despite the above, those who disagree remain within the unions because they hope to obtain, despite everything, the offered aid.

Farmers seem to join unions principally for material reasons. The highest percentage of members (22.88%) stated that

they joined for economic improvement, followed by 21.19% who said they joined for material aid and institutional support.

Even though they belong to one, the members often have a confused idea of the nature of a union. The lack of training is clearly counterproductive, as it can be shown that the majority of people believe that the union is simply a savings and loan cooperative. This idea is quite different from the actual needs of the members and from the conception that the CUSG promoters are trying to impart.

Those interviewed were highly in favor of training for the union membership and leaders in matters of union organization and agricultural techniques. Training for leaders was requested by 98.48% of those surveyed.

Although 58.59% of the members state that they know what the CUSG is, the contradictory result is that 40.41% do not know what it is or did not answer, even though they are union members. In the eastern region we find the highest amount of ignorance, 48.97%. In the southern coastal region and the western region a little more than a third of those interviewed (36%) did not know anything about CUSG.

It is striking that the most numerous group of interviewees (41.41%) felt that union problems resulted from internal differences among the CUSG leadership promoters. However, there is actually little negative opinion about the possibility of effective union action. It is interesting to note that, even though the eastern region has received the least assistance and union training, it received responses which were unfavorable in just 28.57% of the cases. The region with the highest rate of unfavorable responses (30%) was the southern coastal area, which has received the most assistance.

I. INTRODUCTION

The project "Production Services and Agricultural Marketing", implemented by the American Institute for Free Labor Development (AIFLD), proposes to develop the capability of the Confederation for Union Unity of Guatemala (Confederación de Unidad Sindical - CUSG) as regards the services it provides to its affiliated agrarian unions as well as in relation to the internal cohesion of the CUSG itself. These services include agricultural production credits and inputs combined with technological and unionist training.

This study builds on previous research carried out by CUSG and AIFLD among the affiliated agrarian unions. The objective of that research was to fortify the socioeconomic projects of the Confederation, and while it was not exhaustive, it typified the regions that are considered as potential beneficiaries of the project. In that sense, it provided superficial agrarian and socioeconomic description of the objectives, scope, and components of the project.

The three regions where the majority of unions are concentrated, which are also the three regions covered by this Baseline Study, are:

- The eastern region (Oriente): This region includes the departments of Jutiapa, Jalapa, Santa Rosa y Chiquimula.
- The western highlands region: This region includes the departments of Solol, Totonicapán and Quetzaltenango.
- The South-western or south coast region: This region includes the coastal plain part of the departments of Quetzaltenango, San Marcos, Suchitepéquez and Retalhuleu.

Several meetings were held between AIFLD and CUSG officials and the Baseline Study team to assure the smooth implementation of the study. In accord with the project terms of reference, the research was to include three interrelated aspects: an agricultural study, a socioeconomic study, and a political and policy study. Each one of these sub-studies was to provide the qualitative and quantitative data that would assist in the implementation, development, and evaluation of the project.

The appropriate unions were selected during a series of meetings with the leaders and field promoters from CUSG with the objective of collecting the most reliable data. The unions selected were checked for aspects such as accessibility, number of members, amount of time they had been affiliated, and the quality of the relationship of the union with CUSG. Also, the schedule and dates for visits to each union and the respective contacts for each promotor were established. Personnel from CUSG

provided brief commentaries on the activities and history of the agrarian unions to be visited, so that the field team would have current information on each site before field interviews began.

These meetings also served to review the field work instrument and discuss possible revisions, and CUSG personnel suggested several changes on items they considered might represent problems during the interviews. These suggestions were taken into account, and the necessary corrections and clarifications were made. The Baseline Study instrument contains a great variety of indicators, which are discussed in section "C. Indicators" of this report.

Regarding the sample, it was decided that a minimum of 144 interviews would be represent a reliable sample, a number which was eventually achieved and slightly exceeded. It should be noted that with some of the unions visited we were able to count on considerable cooperation from the union members and also from the promoters of CUSG working with those unions. However, with other unions, due to farm work schedules and other causes, it was very difficult to obtain data. One of the limiting causes for the field work was lack of communication on the part of some promoters. In some communities, for example, the union members were called for a meeting on dates and times different from the pre-established ones.

Eighteen communities were visited, covering a total of 19 unions. There was considerable interest among the union members regarding the activities that we were to carry out. It is possible to affirm that all union members hope to see the project carried out as soon as possible. There is no doubt that among these union groups there are people willing to cooperate who represent leadership capability in their communities.

II. ORGANIZATION AND METHODOLOGY OF THE BASE STUDY

A. REGIONALIZATION

According to information provided by CUSG/AIFLD, there were three zones in which the present concentration of unions was greater than in the rest of the country. For the Baseline Study, those unions were selected which were considered most representative and which would provide information that could be accepted as typical or model. As we mentioned above, aspects as accessibility, work developed, time of existence, and so on, were also determining factors. The regions to be visited were the following:

1. SOUTH WESTERN COAST

The following unions were covered in the departments of Retalhuleu, Suchitepéquez, San Marcos and Quetzaltenango.

1.1 Retalhuleu:

- a. The union of the community Caballo Blanco, municipality of Retalhuleu.
- b. The union of La Montaña, municipality of Retalhuleu.

1.2 Suchitepéquez:

- a. The union of La Máquina, Centro I, municipality of Cuyotenango.

1.3 San Marcos:

- a. The union of the community of Salinas II, municipality of Ocós.
- b. The union of the municipality of Ayuta, ciudad Tecún Umán.

1.4 Quetzaltenango:

- a. Union of the community of San Agustín Pacaya, municipality of Coatepeque.

2. WESTERN HIGHLANDS

The departments of Quetzaltenango, Sololá, and Totonicapán were included, and the following unions were visited:

2.1 Quetzaltenango:

- a. Union of Cantón Xecaracoj, municipality of Quetzaltenango.
- b. Union of Cantón Tierra Colorada Baja, municipality of Quetzaltenango.
- c. Union of the community Chirijquiac, municipality of Cantel.

2.2 Sololá:

- a. Union of the community of Chuiquel, municipality of Sololá.
- b. Union of the community of Chaquijyá, municipality of Sololá.

2.3 Totonicapán:

- a. Union (weavers), community of Vásquez, municipality of Totonicapán.
- b. Union (farmers), community of Vásquez, municipality of Totonicapán.

3. EAST

The departments of Jutiapa and Santa Rosa were visited, covering the following unions:

3.1 Jutiapa:

- a. Union of the community El Barrial, municipality of Jutiapa.
- b. Union of the community Pino Santa Cruz municipality of Moyuta.
- c. Union of the community Las Brisas, municipality of Yupiltepeque.
- d. Union of the community El Bran, municipality of Conguaco.

3.2 Santa Rosa:

- a. Union of the community Las Cabezas, municipality of Oratorio.

- b. Union of the community El Pinalito, municipality of Casillas.

B. SELECTION OF THE SAMPLE AND FIELD INSTRUMENTS

As part of the field work plan, realized in conjunction with the leaders of CUSG, a total of 6 unions per region were chosen, according to the parameters already indicated. From each union a minimum of eight surveys would be obtained, which would provide the required total sample of 144 people.

This fieldwork was to be carried out in accordance with arrangements established with the CUSG promoters. Union members would be called to the union headquarters in the community, at a particular date and time. If it were the case that the number of members present was more than the required number, the members to be interviewed would be chosen at random. This arrangement unfortunately proved to be unworkable, due to the farm work schedules and also the time of the year that the majority of surveys were carried out, which in many communities was just before the harvest. With the members of some unions, we were forced to make visits to members' homes, which resulted in delays in accomplishing the planned field program. In spite of these problems, the total number of interviews slightly exceeded the number originally programmed.

The field work instrument was considered adequate for the task at hand, according to the experience of some members of the research team who had worked with a similar instrument in similar communities. The survey form was divided into three sections as mentioned above and was revised several times by the leaders of CUSG, the officials of AIFLD, and the research team. The average time per each survey was one hour. The instrument was easy to use, and the items contained stimulated interest and led to cooperation on the part of the people interviewed. In the few cases where the interviewee was monolingual in an Indian language, one of the union members or a promoter functioned as interpreter. During these cases, the time per survey was occasionally doubled.

The most difficult part of the survey was the part regarding political aspects. The union members were reticent about answering questions in this area, generally due to fear brought on by the present and past political situation of the country. The main reason for this problem was the structure of the political ballot, which included a large number of open questions in which the interviewee had to express his or her opinion, and members were afraid of saying something which might be wrongly construed by someone.

The agricultural research team, working separately from the the questionnaire team, carried out interviews oriented toward reinforcing the results of the field instrument. The agricultural research team visited each of the regions and communities selected with the support and orientation of the promoters. Initially, a minimum of four interviews per day were targeted in as many unions as possible, but the final number of interviews was more than double the original target.

Apart from the interviews with farmers, information was obtained through visits to the fields to look at the development, health, and condition of crops in the field. Regarding the sesame plantations, people from the purchasing/export companies were interviewed also, since the project is promoting this product in the South-Western region.

C. INDICATORS

The data for this Baseline Study will be organized in three independent reports: socioeconomic, agricultural, and political. Although it is difficult to separate aspects that are very much related, especially the socioeconomic and the agricultural aspects, such organization provides a progressive degree of specificity about the data. Certainly, while it is expected that the population data represent the regional situation in general, the agricultural data describe the particular situation of the farmer, especially in relation to his participation in the CUSG agricultural programs, and the political data explore the political attitude resulting from their affiliation with a union.

The socioeconomic study describes the union groups in their demographic, linguistic, educational, religious, and housing aspects. The economic data includes general regional description of land tenure and estimations of family income and expenses per economic activity, type of expenses, and so on.

DEMOGRAPHIC DESCRIPTION

- Familiar: Size and composition of the familiar groups.
Age groups.
- Educational: Degree of literacy by sex and age.
- Linguistics: Predominant languages in each region.
Monolingualism and bilingualism in relation
to the school and age groups.
- Housing: Type of dwelling by region. Access to
electricity and potable water.

ECONOMIC DESCRIPTION

- Annual income: derived from agriculture and from other activities.
- Annual expenses: Family, medical, food.
- Agriculture: Tenure and size of plots of land worked by region. Regional land tenure differences.
- Credits: Access and use of credits. Sources of credits.

The information in the agricultural report comes from two sources, the survey questionnaire and the interviews carried out by the agricultural team. Since we are dealing mainly with groups of farmers, this is the most extensive part of the report. This section attempts to describe not only the actual state of agriculture in the regions studied but also the variations found in each one of the regions due to the influence of CUSG programs. From the agricultural description of the regions in general, and from the agricultural situation of the peasants organized in unions in particular, it should be possible to establish the incidence of the provision of agricultural services, credits, and marketing strategies in the life of the union members.

AGRICULTURAL DESCRIPTION

- Actual status of agriculture: size and type of possession of land which is worked by the union members.
- Agricultural technology: Used of agricultural methods, traditional and non-traditional: irrigation systems, preservation of soil, mechanization, analysis of soils, use of pesticides, and fertilizers. Information sources available on these methods.
- Agricultural credits: Utilization of credits for agricultural production. Sources of credit.
- Agricultural production: Main crops per region. Traditional and non-traditional crops. Methods for planting. Harvest and marketing. Production by crop.

The political report, which covers not only organizational aspects but also political attitudes, describes the degree of internal cohesion of the unions and their ability to work as unions, as well as their ability to represent the interests of members. The data regarding organizational aspects and the way the union operates are presented according to information provided by the members. Items on politics explore attitudes

towards the unionism in general, towards the work that CUSG is carrying out, and towards the actions of the union itself. The main indicators are:

ORGANIZATIONAL

- Formation: Knowledge about the foundation, legalization process, and about present and past activities of the union.
- Organization: Organizational structure of the union. Knowledge about the organization of the union itself. Services offered by the union. Ability of the union to resolve the problems of the members.
- Training: Type of training required by the leaders and by the members.

POLITICAL

- Affiliation: Reasons why they decided to join the union. Advantages obtained from joining. Importance of the existence of the unions. Expectations on the part of the members on joining the union.
- Relationship between CUSG and the unions: Knowledge about CUSG, services offered by CUSG. Opinions about the kind of work CUSG is doing in relation to the union.
- Union action: Role of the union in its community. Principal problems that the unions are facing. Political role of the unions.

III. RESULTS

A. SOCIOECONOMIC STUDY

1. Characteristics of Surveyed Groups

1.1 Family size and age groups

The average Guatemalan family has 6 members. Among those surveyed, the average family in the southern coastal and eastern regions has 7 members, while in the west it has 6. The table below shows family size per region. We should point out that what we are calling a family group here is not actually a nuclear family; we are including all persons who live under the same roof, which can on occasions include very diverse kinship ties and can exclude children who are not currently living in their father's house and who don't contribute directly to household expenses. The term "Heads of household" here refers to surveyed affiliates and their wives, and not, for instance, to adult relatives.

The most common family group, as defined above, includes the surveyed member, his wife, the parents of one of these heads of household, school age children (under 15), and older single children who live there semi-permanently.

Another family situation that occurs less frequently is one in which any number of siblings live in the same house. In this case we have defined the head of the family as the masculine family member (belonging to the union) who has wife living in the house, whether or not he is the eldest. This situation is most commonly seen in the western region where houses are built on the same property for parents and for siblings and their families, each having their own rooms and perhaps all sharing one kitchen.

TABLE 1: SIZE OF FAMILY GROUP.

	REGION		
Number	So. Coast*	West*	East*
2 and 3 members	6.00	12.76	12.24
4 and 5	22.00	27.66	20.41
6 and 7	34.00	34.04	22.45
8 and 9	24.00	19.15	24.49
10 or more	14.00	6.38	20.41

* Percentages of regional sampling. Complete sampling.

One would initially assume that in real nuclear families, the children who permanently live in the family home contribute to the group's expenses. However this is difficult to determine

since older children who still live at home and work as day laborers may or may not contribute part of their income to the family. Work carried out by younger children is combined with that of the father and generally consists of agricultural work on the family plot. According to results of this study, the percentage of children who live outside the family home and contribute to it is minimal.

The number of offspring per family and region is presented in the table below:

TABLE 2: NUMBER OF OFFSPRING PER FAMILY GROUP.

Number	REGION		
	So. Coast*	West*	East*
1 to 3	23.33	39.02	38.23
4 to 6	36.67	46.34	47.06
7 to 7	13.33	14.63	26.47
10 or more	3.33	--	2.94

* Percentages of regional sampling.

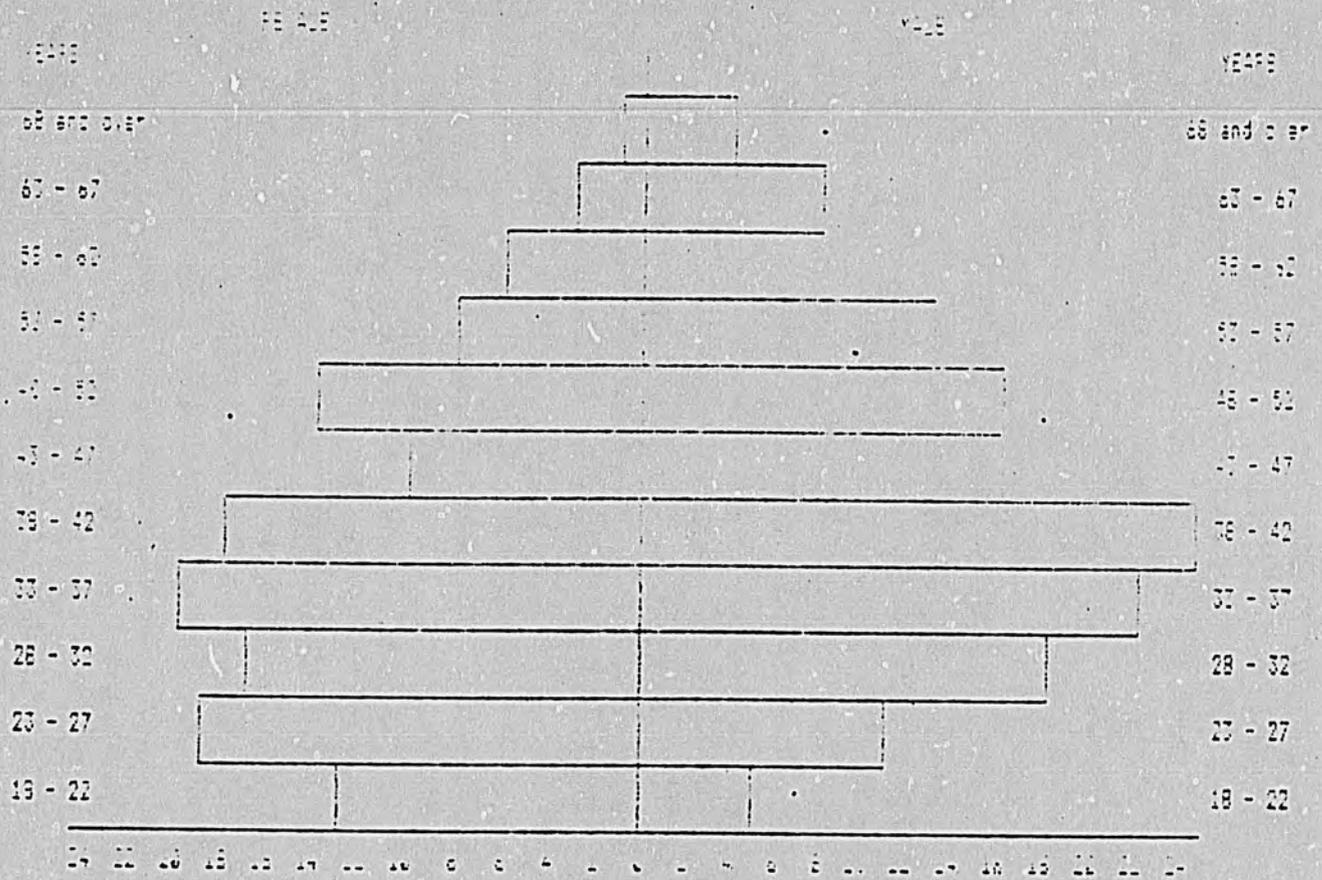
The following two charts illustrate the age distribution of members of the nuclear family, that is, heads of households and their children living permanently or semi-permanently at home.

Graph 1 indicates that in general married women tend to be younger than their husbands and that women die at a younger age. There are few cases of women over 65 compared to men of the same age group.

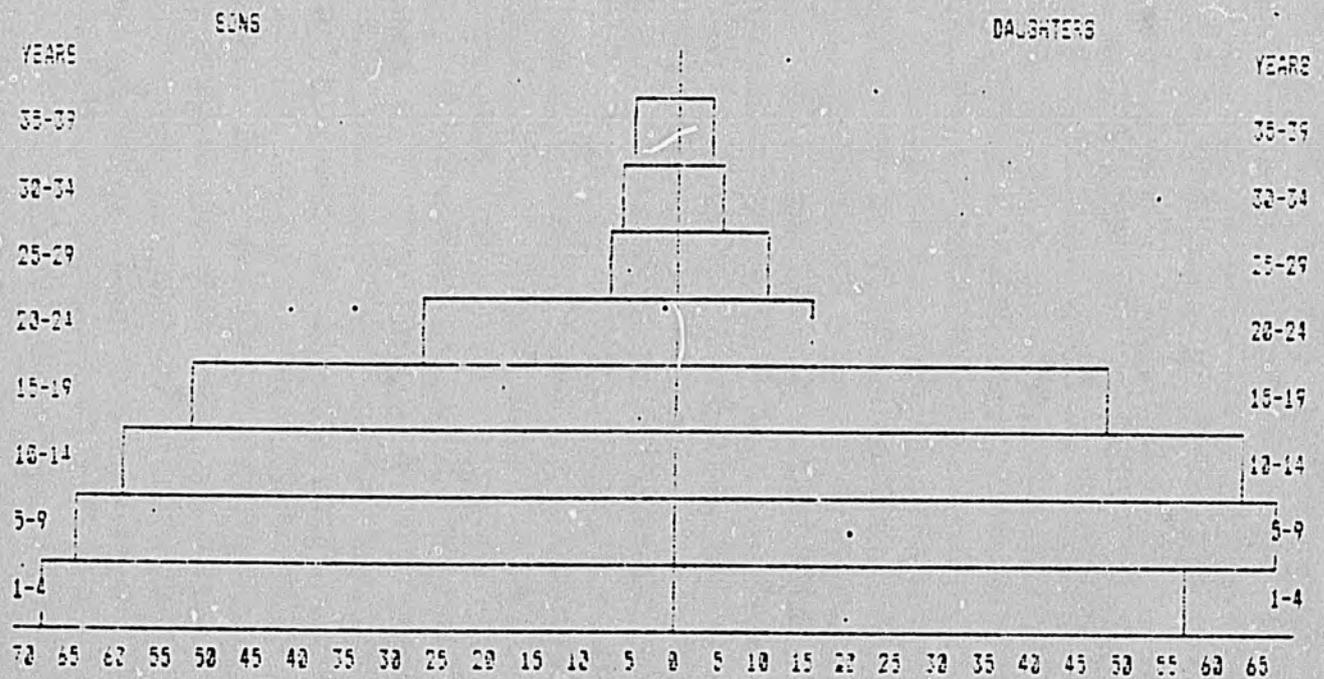
The 18-22 year-old section illustrates that women marry at a younger age; of 13 heads of households in this section; 13 are women. This situation remains constant until the third section (23-27 year-olds); from this section to the ninth (58-62 year-olds) there is nearly a balance between male and female heads of households; there are a few more male heads of households but the difference is not significant. The last two sections illustrate a marked difference between the number of male and female heads; it would appear that men have a higher life expectancy. This could explain, for example, the marked age differences found in marriages between men over 50 and their much younger wives, particularly in the case of a second marriage.

Most marriages are legal; only 24.03% of those surveyed were in common law marriages and 70.96% of these were found in the southern coastal region. Catholicism is the predominant religion among those surveyed (64.82%); this is followed by protestantism (20.69%), but the latter appears to be on the increase, especially in the southern coastal region.

GRAPH 1: AGE DISTRIBUTION. HEADS OF FAMILY



GRAPH 2: AGE DISTRIBUTION. OFFSPRING LIVING IN HOME



The age distribution pyramid in Graph 2 reflects the typical Guatemalan family situation regarding children living in their father's house. The children living at home are generally under age 20 regardless of gender. As illustrated in the 20-24 year old section, women tend to leave their paternal home at a younger age, when they marry, while men bring their wives to their paternal home, at least until the birth of the first child. Men may remain in the paternal home, whether they marry or not, even up to the age of 40, depending on their chances of acquiring their own land; these chances are very narrow, as will be noted later.

1.2 Formal education

Among those surveyed, there is not a high incidence of illiteracy in the male heads of households; only 24.66% indicated they could not read or write anything at all. This percentage coincides with that of those men who never received any formal education (23.28%). However, only 2.73% of the total sampling received more than a primary school education. The majority of those surveyed completed a maximum of third grade; this is especially true in the east where we find the lowest level of formal education and where no one among those surveyed had studied beyond the sixth grade.

TABLE 3: FORMAL EDUCATION. MALE HEADS OF HOUSEHOLDS.

LAST GRADE COMPLETED	REGION		
	So. Coast*	West*	East*
Never attended	26.00	14.89	28.57
1st. Grade	12.00	8.51	22.45
2nd. Grade	16.00	19.15	20.41
3rd. Grade	14.00	21.28	10.20
4th. Grade	18.00	8.51	12.24
5th. Grade	2.00	6.38	2.02
6th. Grade	8.00	17.02	4.08
Beyond primary school	4.00	4.25	--

* Percentages of regional sampling. Complete sampling.

The incidence of illiteracy is greater among the wives of those surveyed: 57.48% of them cannot read or write, and 53.49% never attended school. Their level of formal education is also lower: third grade was completed in very few cases, and sixth grade was reached in even fewer cases.

TABLE 4: FORMAL EDUCATION. FEMALE HEADS OF HOUSEHOLDS.

LAST GRADE COMPLETED	REGION		
	So. Coast*	West*	East*
Never attended	53.50	53.33	48.78
1st. Grade	7.75	6.67	7.32
2nd. Grade	12.40	13.33	9.76
3rd. Grade	15.50	13.33	19.50
4th. Grade	3.90	--	7.32
5th. Grade	4.65	6.67	7.32
6th. Grade	0.77	2.22	--
Beyond primary school	1.55	4.44	--

* Percentages of regional sampling. 129 valid responses.

The incidence of illiteracy among children over 15 who have presumably stopped attending school is considerably lower (6.25%). The level of formal education has noticeably risen, especially in the western region where 58.13% of those surveyed have reached between third and sixth grade, and where at least 20% have studied beyond the primary school level, usually junior high school.

The eastern region has the highest incidence of illiteracy, drop-outs, and people who never went to school. In the region children tend to begin helping in the fields at a very young age, even before school age (7). Schools are generally located on the edge of urban centers, far from the surrounding villages, and there are often problems with the availability of teachers. However, the population density per square kilometer in the western region is greater than in the other 2 regions; this would tend to raise the literacy and formal education figures which are lower and higher respectively in the west.

TABLE 5: FORMAL EDUCATION. CHILDREN OVER 15.

LAST GRADE COMPLETED	REGION		
	So. Coast*	West*	East*
Never attended	6.00	--	8.33
1st. Grade	16.00	--	8.33
2nd. Grade	12.00	--	14.58
3rd. Grade	22.00	20.93	16.67
4th. Grade	6.00	13.95	2.08
5th. Grade	2.00	4.65	8.33
6th. Grade	10.00	39.53	31.25
Beyond Primary School	26.00	20.93	10.42

* Percentages of regional sampling

Data regarding formal education of school-age children, 6-15 years old, is based on the school year ending in 1988, when the survey was carried out.

TABLE 6: FORMAL EDUCATION. SCHOOL-AGE CHILDREN (6-15 YEARS OLD)

LAST GRADE COMPLETED	REGION		
	So. Coast*	West*	East*
'Castellanizacion'**	--	8.77	--
1st. Grade	32.26	10.53	32.79
2nd. Grade	14.52	29.82	21.31
3rd. Grade	19.35	19.30	16.39
4th. Grade	17.74	15.79	8.20
5th. Grade	9.68	7.02	8.20
6th. Grade	6.45	8.77	11.47
Beyond primary School	--	--	--

* Percentages of regional sampling.

** Teaching of Spanish as a second language

1.3 Language

The language differences among the surveyed groups typify the regional differences. In the eastern region, 100% of those surveyed are Ladinos whose only language is Spanish; in the western region, which is predominantly indigenous in population, 85% of those surveyed speak a Mayan-derived language, but 80.6% of these people can get along equally well in Spanish; only 6.38% are completely monolingual. The incidence of monolingualism in the west is higher among women (26.83%), especially among those who have had no formal education. In the southern coastal region 80% of affiliates surveyed are monolingual in Spanish, while 20% are bilingual. In this region monolingual and bilingual incidence is distributed in nearly the same way for women.

TABLE 7: LANGUAGE. HEADS OF HOUSE HOLDS (BY GENDER).

	REGION					
	So. Coast		West		East	
	Male	Female	Male	Female	Male	Female
a.	--	2.22	6.38	26.38	--	--
b.	80.00	77.78	17.90	17.07	100.00	100.00
c.	20.00	20.00	78.72	56.10	--	--

a. Monolingual Mayan
 b. Monolingual Spanish
 c. Bilingual

Among school-age children in the southern coast who still live at home with their parents, the relatively higher level of formal education seems to affect the higher incidence of Spanish monolingualism. In the west, children over 15 who have presumably stopped attending school demonstrate a higher incidence of bilingualism; this suggests that in addition to formal education, participation in adult work life affects this incidence since Spanish is the business language of Guatemala. It is interesting to note that among those surveyed in the west, not one child over 15 is completely monolingual in his native language. It should be made clear that although most children may understand their native language, most can neither speak it nor write it.

TABLE 8: LANGUAGE. CHILDREN (BY AGE GROUP)

	REGION					
	So. Coast		West		East	
	6-15	>15	6-15	>15	6-15	>15
a.	---	--	26.10	--	--	--
b.	82.50	78.85	20.29	22.73	100.00	100.00
c.	17.50	21.15	53.62	77.27	--	--
a.	Monolingual Mayan					
b.	Monolingual Spanish					
c.	Bilingual					

1.4 Home

The selection of material for construction of the home varies according to region. Adobe or mud and lathe are the most commonly used wall materials. The majority of homes in the west and east are built with these materials (91.11% and 84.37% respectively). 50% of homes in the southern coast have wooden walls, while 20% are made of brick or cinder block.

Corrugated tin sheeting is the most widely used roofing material. In the southern coast, it is surpassed only by palm leaf, due to its availability and its appropriateness to the hot climate. Roofs in the western and eastern regions are generally made of clay tiles or corrugated tin, and occasionally straw.

The majority of homes in the three regions surveyed have dirt floors. The use of cement or brick for flooring would be tied to income and expenses levels in each region. Cement or brick floors are seen least frequently in the eastern region,

where expenses are recorded as lowest among the three regions surveyed.

The incidence of latrines is also a problem in the east, where more than half the number (65.96%) of homes in the surveyed lack a latrine. Although the absence of a latrine is seen less frequently in the western and southern coastal regions this condition affects at least one-third of the homes in these two regions.

In the southern coast, water for domestic use is generally obtained from communal or private wells. The majority of those surveyed do not have potable water; only 8% have plumbing in their homes.

By contrast, in the western region, 47.83% of members surveyed get their water from a piped system and 30.34% acquire it through communal wells. In the eastern region, the situation changes noticeably: the main source of water for daily use is rivers and streams (44.90%). 28.57% of members surveyed have plumbing in their homes, while 14.28% fill water containers at communal faucets.

The region with the highest incidence of electricity is the west, where 78.26% of homes surveyed have it. In the southern coast, only 20.40% of homes have electricity, while in the east 46.94% have it.

To a degree we can say that each region has a typical kind of home. These are:

Southern coast:

Roof: Thatch or palm leaf
Walls: Wood
Floor: Dirt or cement
Water Source: Communal well
Electricity: Not significantly common
Latrine: More than half have them (64%).

West:

Roof: Corrugated tin or clay tiles
Walls: Adobe or mud and lath
Floor: Dirt
Water Source: Domestic plumbing
Electricity: In most homes
Latrine: More than half have them (67.39%)

East:

Roof: Corrugated tin
Walls: Adobe or mud and lath
Floor: Dirt
Water source: River or stream
Electricity: Approximately half the homes have it
Latrine: Low incidence (34.04%)

In the following tables we can see in greater detail the comparative norms, deficiencies and advantages of the type of construction in each region:

TABLE 9: HOME. WALL MATERIAL

MATERIAL	REGION		
	So. Coast*	West*	East*
Adobe or mud and lath	2.00	91.11	84.34
Brick or cinder block	26.00	4.44	6.25
Wooden boards	50.00	4.44	9.37
Reed, cane, or sticks	22.00	--	--

* Percentages of regional sampling. 127 Valid responses.

TABLE 10: HOME. ROOFING MATERIAL

MATERIAL	REGION		
	So. Coast*	West*	East*
Corrugated tin	39.58	42.22	45.94
Clay tile	--	42.22	24.32
Straw	12.50	15.55	21.62
Palm leaf	47.92	--	8.11

* Percentages of regional sampling. 130 valid responses.

TABLE 11: HOME. FLOOR MATERIAL.

MATERIAL	REGION		
	So. Coast*	West*	East*
Dirt	70.00	71.73	93.20
Cement or bricks	30.00	28.26	6.82

* Percentages of regional sampling. 140 valid responses.

TABLE 12: HOME. LATRINE

	REGION		
	So. Coast*	West*	East*
Has one	64.00	67.39	34.04
Doesn't have one	36.00	32.61	65.96

* Percentages of regional sampling. 143 valid responses.

TABLE 13: HOME. WATER SOURCE

	REGION		
	So. Coast*	West*	East*
Communal well	40.00	30.43	8.16
Communal faucet	--	15.22	14.28
Piped system	8.00	47.83	28.57
Own well	34.00	2.17	4.08
River, stream	18.00	4.35	44.90

* Percentages of regional sampling. 144 valid responses.

TABLE 14: HOME. ELECTRICITY

	REGION		
	So. Coast*	West*	East*
Has it	20.40	78.26	46.94
Doesn't have it	79.59	21.74	53.06

* Percentages of regional sampling. 144 valid responses.

2. Socioeconomic Data

2.1 Land tenure. Regional systems.

The majority (80.43%) of members surveyed have always worked in agriculture as their principal source of income and subsistence, cultivating their own land, renting it, working as sharecroppers, or hiring themselves out as temporary day laborers. The lowest percentage of land owners was found in the southern coast (29%) and the highest in the west (37.34%). In the southern coast, farmers find other sources of income, generally as day laborers, while in the west, economic alternatives include working in crafts, small businesses, or as manual workers. There are few alternatives to agriculture in the

east, where the incidence of renting and share cropping is highest (44.18%).

Members surveyed were asked about the land tenure of their immediate families, that is, parents and siblings, in order to determine norms and possible changes in farmers' productivity in each of the three areas studied. Results indicate that parents of the majority of those surveyed in the southern coast and western regions owned and worked larger areas of land than the members themselves currently do, although this is not possible to verify.

It would appear that family land fragmentation and the subsequent mini-holdings are most apparent in the southern coast and the western highlands, where according to those surveyed, their parents owned larger areas of land than they themselves work, especially in the southwest. In the southern coast, 85.72% of the members' parents had owned more than 2 manzanas (1.4 hectares), and 32.5% in the western region had owned more than one manzana (.7 hectare). By contrast, the situation in the eastern region has not actually worsened, but has remained stable: while currently only 55.92% of those surveyed own their own land, only 60.42% of their parents did so, but 55.87% of these parents owned more than one manzana; among their children only 15% work plots this size.

TABLE 15: LAND TENURE. PARENTS OF THOSE SURVEYED

	REGION		
	So. Coast*	West*	East*
Had or have land	74.47	82.98	60.42
Don't have land	25.53	17.02	39.58

* Percentages of regional sampling. 142 valid responses.

The most frequently occurring system for handing down land, especially in the western region, is to divide it equally among the children; this is followed by the selling of the land and the subsequent distribution of the money among the children and the surviving spouse. In the west, the proportional distribution of family land has always been one of the principal causes of land fragmentation.

For data regarding current land tenure among members, see section #2 of the Agronomic Report: "Current Agricultural Situation".

TABLE 16: DISTRIBUTION OF FAMILY LAND AFTER THE FATHER'S DEATH.

	REGION		
	So. Coast	west	East
Inherited by spouse	15.38	--	5.00
Inherited by oldest child	--	10.00	10.00
Inherited by youngest child	7.69	--	--
Divided among the children	46.15	70.00	55.00
Inherited by other relatives	--	--	15.00
Sold	23.08	20.00	10.00
Intestate	7.69	--	5.00

The following table illustrates current land tenure among siblings of the members surveyed, which presumably represents the regional situation.

TABLE 17: CURRENT LAND TENURE BY REGION.

Number	REGION		
	So. Coast	West	East
% of members who own their own land	48.27	70.84	55.92
% of siblings who own their own land	40.00	55.32	38.77

* Percentages of regional sampling. 146 valid responses.

The only region where there seems to be a relation between belonging to the union and land ownership is the west. In the east only half of those surveyed own their own land, and in the southern coast where the incidence of renting is highest, approximately the same ratio exists.

The area of land worked by the members' siblings, either their own or rented, is approximately the same as that worked by the union members (see Agronomic Report: 2. Current Agricultural Situation). In the southern coast where the area of land worked is largest, 58.34% of siblings work areas larger than two manzanas (among members surveyed it is 55.17%). In the east, 85% of members and 78.84% of their siblings work areas smaller than one manzana. In the west, 86.96% of members surveyed and 88.23% of their siblings work less than one manzana.

TABLE 18: AREA OF LAND WORKED. SIBLINGS OF MEMBERS

MANZANAS (.7 hectare)	REGION		
	So. Coast*	West*	East*
0.01-0.28	2.78	47.06	33.33
0.21-0.40	13.98	26.47	16.64
0.41-0.60	2.78	--	25.00
0.61-0.80	--	1.47	--
0.81-1.00	--	13.23	4.17
1.01-2.00	22.22	--	8.33
2.01-5.00	27.78	5.88	--
5.01-10.00	22.22	5.88	--
10.01-20.00	2.78	--	8.33
More than 20	5.56	--	4.17

* Percentages of regional sampling. 128 valid responses.

2.2 Obtaining and Using Credit

Lack of knowledge regarding credit is one of the principal problems that peasants face in trying to finance their agricultural production; this lack of knowledge is not only concerning the appropriate institutions, but also the terms under which credit is given. Apparently CUSG'S system of giving credit in the form of inputs presents fewer problems for members: the term of the credit is short, quantities of inputs are based on the size of the plot to be worked, and the interest rate is reasonable.

In the southwest, the incidence of obtaining and using credit for agricultural production increased, from 48% of union members in 1987 to 72% in 1988. Of these loans, 37.49% came from CUSG in 1987, and 29.16% from BANDESA. In 1988, the incidence of CUSG loans for agricultural inputs increased to 66.66% against a decrease in BANDESA loans to 19.45%.

83.33% of 1988 CUSG loans were for less than Q.300 in inputs. Of these the majority ranged between Q.100 and Q.200, but the number of loans between Q.200 and Q.300 had increased from 12.5% in 1987 to 25% in 1988. The biggest loans given both in 1987 and 1988 came from BANDESA, and they were presumably used to pay contracted labor and machinery rental.

In the western region, 44% of members received credit in 1987. The increase in 1988 was not as great as in the southern coast: only 51% of members in the western highlands. In this region, the incidence of CUSG credit increased noticeably from only 3 loans in 1987 to 12 in 1988, largely replacing private loans as a major source of 1987 credit. However, the 12 loans

only represent 25.53% of the local membership. The number of loans given by BANDESA has remained stable these two years. 100% of loans granted by CUSG in this region were for less than Q.300. The majority (75%) of loans given in 1988 ranged between Q.100 and Q.200.

The incidence of giving credit in the east was increased more than in the west (22.45% in 1987 to 46.94% in 1988); however CUSG credit was obtained by only 32.65% of the membership, and in no case did the amount exceed Q.200.

Cooperatives do not appear to be a regular source of credit in any of the three regions, although in the southern coast there is a small incidence of cooperative loans. In the east, credit from BANDESA (17.39% of the 1988 total) does not exceed Q.500.

The tables 19 to 21 describe the source and amount of credit obtained by members surveyed in 1987 and 1988.

As will be seen below in the agronomic report, the inputs obtained by credit from CUSG are insufficient for the farmers' needs, despite the fact that they are loaned according to the size of the plot. Nevertheless, this system is better than cash loans. The term established for loan repayment tends to be a maximum of 12 months or the end of the harvest and marketing period (approximately 6 months). Few people surveyed were unable to pay the debt at the end of the 1987 harvest.

Loans to cover other needs besides agricultural production are very rare in the three regions studied. These loans are generally obtained from family members or private individuals, and tend to be used for home building or the purchase of additional land.

TABLE 19: SOURCE AND AMOUNT OF CREDIT 1987/1988. SOUTH COAST
AMOUNT

AMOUNT	SOURCE OF CREDIT									
	Family		Private		CUSS		Cooperative		BANDESA	
	87	88	87	88	87	88	87	88	87	88
1 - 100	--	--	4.16	2.78	16.67	13.99	--	--	--	--
101 - 200	8.33	2.78	--	2.78	12.58	27.76	--	--	--	--
201 - 300	--	2.78	--	--	4.16	13.99	4.16	--	--	2.78
301 - 400	4.16	--	4.16	--	4.16	5.55	--	--	--	--
401 - 500	--	2.78	--	--	--	--	4.16	2.78	8.33	2.78
601 - 700	--	--	--	--	--	5.55	--	--	--	--
701 - 800	--	--	--	--	--	--	--	--	--	2.78
OVER 1000	--	--	--	--	--	--	4.16	--	20.83	11.11
	12.49	8.34	8.32	5.56	37.49	66.66	12.48	2.78	29.16	19.45

* Percentages given are for total credit for one year.

TABLE 20: SOURCE AND AMOUNT OF CREDIT 1987/1988. WEST
AMOUNT

AMOUNT	SOURCE OF CREDIT							
	Family		Private		CUSS		BANDESA	
	87	88	87	88	87	88	87	88
1 - 100	--	--	9.52	4.17	--	8.33	--	20.83
101 - 200	--	--	14.28	4.17	--	37.50	19.05	--
201 - 300	4.76	--	4.76	--	14.28	4.17	--	--
301 - 400	--	4.17	--	--	--	--	9.52	--
401 - 500	4.76	--	4.76	--	--	--	--	4.17
501 - 600	--	--	--	--	--	--	--	--
601 - 700	--	--	--	--	--	--	--	4.17
901 - 1000	--	--	--	4.17	--	--	--	--
OVER 1000	--	--	4.76	--	--	--	9.52	4.17
	9.52	4.17	38.08	12.51	14.28	50.00	38.09	33.34

* Percentages given are for total credit for one year.

TABLE 21: SOURCE AND AMOUNT OF CREDIT 1987/1988. EAST
AMOUNT

AMOUNT	SOURCE OF CREDIT							
	Family		Private		CUSS		BANDESA	
	87	88	87	88	87	88	87	88
1 - 100	--	4.54	--	9.10	9.10	40.91	9.10	--
101 - 200	--	--	--	--	18.18	31.81	18.18	4.54
201 - 300	--	--	--	--	--	--	--	4.54
301 - 400	--	--	--	--	9.10	--	--	4.54
401 - 500	--	--	9.10	--	--	--	--	4.54
501 - 600	--	--	--	--	--	--	9.10	--
601 - 700	--	--	--	--	9.10	--	--	--
701 - 800	--	--	--	--	--	--	9.10	--
	--	4.54	9.10	9.10	45.48	72.72	45.48	18.18

* Percentages given are for total credit for one year.

3. Economic Description

3.1 Land rental expenses

Members who rent land represent 41.10% of the total sampling. The differences in their total rental expenses are due in part to the size of the plots and their yields, and also to the fact that in some places it is customary to pay for the use of the land in kind or in hours of work.

In the eastern region, 40.82% of those surveyed rent land, in the southern coastal region 44% rent, and in the western highlands 38.30% rent. The majority of these (55%) rent from family members, which implies a wide variety in the type, amount, and frequency of payment. In the western highlands 100% of those surveyed who rent do so from family members, while in the eastern region 70% rent from family members. Another group (30%) rents from small landowners, 13.33% rent from large landowners, and 1.67% rent from the government. As can be seen in the following tables, rates are quite low.

TABLE 22: RENTED LAND IN 1987.

	So. Coast*	REGION West*	East*	TOTAL
Yes	44.00	38.30	40.82	41.10
No	56.00	61.70	59.18	58.90

* Percentages of regional sampling.

TABLE 23: TYPE OF LANDOWNERS/1987

	So. Coast*	REGION West*	East*	TOTAL
Family	4.55	100.00	70.00	55.00
Large landowners .	18.18	---	20.00	13.33
Small landowners	77.27	---	5.00	30.00
Government	---	---	5.00	1.67

* Percentages of regional sampling. 60 valid responses.

TABLE 24: ANNUAL RENTAL EXPENSES/1987

	REGION			TOTAL
	So. Coast*	West*	East*	
1 - 50	13.64	76.47	40.00	40.82
51 - 100	9.09	17.65	50.00	20.41
101 - 200	27.27	5.88	10.00	16.33
201 - 300	27.27	---	---	12.24
301 - 400	4.55	---	---	2.04
401 - 500	---	---	---	---
501 - 1000	9.09	---	---	4.08
More than 1000	9.09	---	---	4.08

* Percentages of regional sampling. 49 valid responses.

3.2 Income from 1987 harvest sales

Income from 1987 harvest sales varied by region and depended on the size of the land cultivated. In the southern coastal region plots are larger than in the eastern region, while in the western highlands plots are extremely small. Another factor is production yield which depends on the size of the plot and the extent of technology used in production. A third factor is the type of production and the system of sales vs. private consumption. Although maize is produced in all three regions, for example, not all farmers sell their maize; products such as sesame are sold at a reasonable price but this crop is only grown in the southern coastal area.

Taking all of the above factors into account, we can see that while in the southern coastal region 25.58% of those surveyed had income of over Q.2,500, in the western highlands the highest income ranged between Q.2,101 and Q.2,500 and this range represents only 5% of those surveyed; in the eastern region 8.34% of those surveyed had an income between Q.2,100 and Q.4,000.

Farmers face many problems in the marketing of their products, due to price speculation at the buying centers and by intermediaries. In addition, INDECA (National Institute for Agricultural Marketing) fails to come through on offers to buy products, especially on the southwest coast. Some union members express hope that CUSG will establish a policy to coordinate the sale of their products in order to avoid such problems.

* See Agronomic Study: "2. Current Agricultural Situation".

TABLE 25: INCOME FROM 1987 HARVEST SALES

		REGION			TOTAL
		So. Coast*	West*	East*	
0	- 100	2.33	10.00	8.33	5.75
101	- 300	---	25.00	25.00	12.64
301	- 600	13.95	15.00	20.83	16.09
601	- 900	16.28	15.00	12.50	14.94
901	- 1200	9.30	15.00	16.67	12.64
1201	- 1500	4.65	5.00	---	3.45
1501	- 1800	6.98	5.00	---	4.58
1801	- 2100	9.30	5.00	8.33	8.05
2101	- 2500	11.63	5.00	4.17	8.05
2501	- 3000	4.65	---	---	2.30
3001	- 3500	4.65	---	---	2.30
3501	- 4000	4.65	---	4.17	3.45
More than 4000		11.63	---	---	5.75

* Percentages of regional sampling. 87 valid responses.

3.3 Income from additional work

In all three regions union members work in other activities besides farming their plots of land. This accounts for 45.14% of those surveyed. In the southern coastal region this is the case for 17 out of 49 persons surveyed (34.69%). Of these 17 people, 11 work as agricultural day laborers (64.71%), 3 run small businesses (17.65%), 2 are manual workers (11.76%), and 1 is working in the services sector (5.88%). In the western highlands 29 of 46 people surveyed or 63.04% work outside their farming activities: 5 in service jobs (17.24%), 6 as agricultural day laborers (20.69%), 10 as manual laborers (34.48%), and 8 as craftsmen (27.59%). In the eastern region, 19 of 49, or 38.77%, are in this category. Of these, 1 is a manual laborer (5.26%), 3 work in services (15.79%), and 15 are agricultural day laborers (78.95%).

An agricultural day laborer is defined here as one who works on a plantation or a plot belonging to someone else and who receives wages. Small businesses include selling various items in local or urban markets, or owners of small businesses. Workers include masons, small factory workers, etc. The service area includes government branch jobs, transportation, security, and so forth. Craftsmen in the western highlands are generally potters or weavers.

However, 54.86% of those surveyed do not work outside their farm, as is show in the following table:

TABLE 26: ADDITIONAL WORK IN 1987

	So. Coast*	REGION West*	East*	TOTAL
Yes	34.69	63.04	38.77	45.14
No	65.31	36.96	61.22	54.86

* Percentages of regional sampling. 144 valid responses.

TABLE 27: TYPE OF ADDITIONAL WORK CARRIED OUT IN 1987

	So. Coast*	REGION West*	East*	TOTAL
Day laborer	64.71	20.69	78.95	49.23
Business	17.65	---	---	4.61
Worker	11.76	34.48	5.26	20.00
Services	5.88	17.24	15.79	13.85
Crafts	---	27.59	---	12.31

* Percentages of regional sampling. 65 valid responses.

The average annual income from this additional work is Q.250 in the southern coast, Q.900 in the western highlands, and Q.600 in the eastern region. This diversity is explained in part by the fact that in the western highlands a large group of people work in areas that are better paid such as services and crafts.

A large percentage of those surveyed in the western highlands are manual laborers, which is apparently not very well paid, but since most of them are masons, higher construction costs have slightly raised their wages. By contrast, in the southern coast and eastern regions, a large percentage of those surveyed work at jobs that are poorly paid such as agricultural day laborers. However, in the southern coast this is relatively offset by the higher income from small businesses.

TABLE 28: ANNUAL INCOME FROM OTHER WORK IN 1987

		REGION			TOTAL
		So. Coast*	West*	East*	
0	- 100	31.25	3.45	31.58	18.75
101	- 500	31.25	20.69	21.05	23.44
501	- 900	12.50	17.24	31.58	20.31
901	- 1300	---	17.24	5.26	9.37
1301	- 1700	6.25	13.79	---	7.81
1701	- 2100	6.25	6.87	5.26	6.25
2101	- 2500	6.25	13.79	---	7.81
2501	- 3000	---	---	5.26	1.56
3001	- 3500	---	---	---	0
3501	- 4000	---	3.45	---	1.56
More than 4000		6.25	3.45	---	3.12

* Percentages of regional sampling. 64 valid responses.

3.4 Annual family expenses

3.4.1 1987 medical expenses

All three regions show a high incidence of medical expenses: 75.15% in the southern coast, 73.33% in the western highlands, and 61.22% in the east. The amount spent depends on the availability of hospitals, health centers, pharmacies, the distance to them, and the prices charged there. There is no significant difference among the three regions in the amount spent annually on medical care: an average of Q.80 in the southern coast, Q.70 in the western highlands, and Q.50 in the east. It should be pointed out that these figures include doctor and nurse's care and medicine, but not traditional medical practitioners such as healers, mid-wives, "sobadores", etc. Prices for this type of care are not stable, although they are quite low. There are no patterns on which to base regional comparisons; in most cases payments are made in kind, and often services are free.

TABLE 29: ANNUAL MEDICAL EXPENSES/1987

	REGION			TOTAL
	So. Coast*	West*	East*	
0 - 50	10.81	25.81	43.33	25.51
51 - 100	35.13	29.03	20.00	28.57
101 - 150	13.51	19.35	16.67	16.33
151 - 200	10.81	12.90	10.00	11.22
201 - 250	5.41	3.22	3.33	4.08
251 - 300	2.70	3.22	3.33	3.06
301 - 350	8.11	3.22	3.33	5.10
351 - 400	5.41	---	---	2.04
401 - 450	2.70	---	---	1.02
More than 450	5.41	3.22	---	3.06

* Percentages of regional sampling. 98 valid responses.

3.4.2 Celebration and holiday expenses

In all three regions, approximately the same amount was spent on holidays and celebrations: an average of Q.25 in the southern coast and western highlands, and Q.20 in the east. There are no significant differences because the cost of celebrations depends on the same factors in all three regions: community committees who determine contributions, the calendar of religious celebrations, and so on. On the other hand, the figures above include money spent on family celebrations, such as baptisms, weddings, and so forth, which are less frequent. The expenses in this category are actually occasional expenses that have little impact, according to several members surveyed.

TABLE 30: HOLIDAY AND CELEBRATION EXPENSES/1987

	REGION			TOTAL
	So. Coast*	West*	East*	
0 - 25	39.13	28.57	70.83	43.90
26 - 50	21.74	17.14	20.83	19.51
51 - 75	---	8.57	4.17	4.88
76 - 100	21.74	11.43	---	10.97
101 - 150	8.69	14.29	---	8.54
151 - 200	4.35	8.57	---	4.88
201 - 300	4.35	2.86	---	2.44
301 - 400	---	5.71	4.17	3.66
More than 400	---	2.86	---	1.22

* Percentages of regional sampling. 82 valid responses.

3.4.3 Household and work expenses

This includes such household items as dishes, brooms, and furniture, and work tools such as shovels, machetes, and hoes. These expenses depend on each family's need, the quality of the items purchased, and where they are purchased. An annual average can be estimated at Q.80 for the southern coast, Q.50 for the western highlands, and Q.50 for the eastern region.

TABLE 31: HOUSEHOLD AND WORK EXPENSES

	REGION			TOTAL
	So. Coast*	West*	East*	
0 - 50	26.53	26.09	38.78	30.56
51 - 100	20.41	17.39	26.53	21.58
101 - 150	20.41	10.87	12.24	14.58
151 - 200	6.12	10.87	4.08	6.94
201 - 300	4.08	6.52	6.12	5.56
301 - 400	4.08	13.04	6.12	7.64
401 - 500	2.04	6.52	---	2.78
501 - 600	4.08	4.35	2.04	3.47
701 - 800	4.08	---	---	1.39
801 - 900	---	---	2.04	0.69
More than 1000	8.16	4.35	2.04	4.86

* Percentages of regional sampling. 144 valid responses.

3.4.4 Clothing expenses

Clothing expenses generally vary from one region to another. 70.83% of those surveyed in the southern coastal region had clothing expenses last year, 93.48% in the western highlands, and 83.80% in the eastern region. The average annual clothing expense is Q.120 in the southern coast, Q.310 in the western highlands, and Q.120 in the east. This variation is due to the high cost of traditional woven clothing worn by indigenous women in the western highlands - much more expensive than clothing worn by the mostly Ladino population in the other two regions.

TABLE 32: ANNUAL CLOTHING EXPENSES

	REGION			TOTAL
	So. Coast*	West*	East*	
0 - 75	14.71	2.32	17.07	11.02
76 - 150	29.41	9.30	43.90	27.12
151 - 225	14.71	16.28	19.51	19.95
226 - 300	8.82	23.26	7.32	13.56
301 - 375	2.94	20.93	9.76	11.86
376 - 450	5.88	11.63	---	5.93
451 - 525	---	4.65	---	1.69
526 - 600	8.82	6.98	---	5.08
601 - 700	5.08	2.32	2.44	3.39
More than 900	8.82	2.32	---	3.39

* Percentages of regional sampling. 118 valid responses.

3.4.5 Food expenses

Food expenses vary according to the region. It should be pointed out that those surveyed were men and it is women who are in charge of this category; this would explain a certain degree of unawareness and inaccuracy regarding this data. The average annual food expense in the southern coastal area is Q.1,600 or Q.133.33 per month; in the western highlands the annual average is Q.1,100 or a monthly average of Q.91.67; the annual average in the eastern region is Q.1000, or approximately Q.83.33 per month.

TABLE 33: ANNUAL FOOD EXPENSES

	REGION			TOTAL
	So. Coast*	West*	East*	
0 - 500	6.12	2.27	4.25	4.29
501 - 1000	8.16	22.73	31.91	20.71
1001 - 1500	26.53	18.18	21.28	22.14
1501 - 2000	28.57	15.91	12.77	19.29
2001 - 2500	14.29	11.36	17.02	14.29
2501 - 3000	2.04	18.18	10.64	10.00
3001 - 3500	---	4.55	2.13	2.14
3501 - 4000	6.12	6.82	---	4.29
4001 - 4500	2.04	---	---	0.71
4501 - 5000	2.04	---	---	0.71
More than 5000	4.08	---	---	1.43

* Percentages of regional sampling. 140 valid responses.

3.4.6 Transportation expenses

The statistical analysis reveals near uniformity in the average annual transportation expense in the three regions studied. This figure amounts to Q.110 in the southern coast and western highlands, and Q.100 in the east. Annual transportation costs are minimal since transportation is not used regularly but rather only for trips to the provincial capital or the nearest municipality to celebrate holidays, for occasional needs such as health, for buying major inputs, and so on. Expenses for family trips are also low since these occasions are rare.

TABLE 34: ANNUAL TRANSPORTATION EXPENSES

		REGION			TOTAL
		So. Coast*	West*	East*	
1	- 50	16.67	6.90	20.00	14.85
51	- 100	33.33	27.59	43.33	34.65
101	- 150	23.81	20.70	23.33	22.77
151	- 200	4.76	13.79	3.33	6.93
201	- 250	9.52	6.90	3.33	6.93
251	- 300	---	3.45	3.33	1.98
301	- 350	7.14	6.90	3.33	5.94
351	- 400	2.38	6.90	---	2.97
401	- 450	---	6.90	---	1.98
451	- 500	2.38	---	---	0.99

* Percentages of regional sampling. 101 valid responses.

TABLE 35: TRANSPORTATION EXPENSES/FAMILY TRIPS

		REGION		
		So. Coast*	West*	East*
1	- 25	35.48	21.43	35.71
26	- 50	35.48	17.86	25.00
51	- 75	---	14.29	10.71
76	- 100	16.13	10.71	7.14
101	- 125	6.45	3.57	7.14
126	- 150	---	17.86	3.57
151	- 175	---	---	10.71
176	- 200	6.45	7.14	---
201	- 250	---	3.57	---
300+		---	3.57	---

* Percentages of regional sampling. 87 valid responses.

B. AGRONOMIC REPORT

1. Agro-ecological conditions of the regions

1.1 South West

This zone is made up of the departments of Escuintla, Suchitepéquez, Retalhuleu, and the lowlands of Quetzaltenango and San Marcos. The area has dry sub-tropical, humid sub-tropical, and very humid sub-tropical climates; the temperatures vary between 19 and 38 degrees centigrade; the topography is relatively flat with small hills, and clay-loam and sandy-loam soil for the most part.

Maize (*Zea Mays*) is the dominant crop of the region among small and medium-scale farmers. It is followed in the order of relative importance, by sesame (*Sesamum indicum*), sorghum (*Sorghum vulgare*), rice (*Oriza sativa*), and to a lesser degree tomato (*Lycopersicum esculentum*), watermelon (*Citrullus vulgaris*), peanuts (*Arachis hypogea*), black beans (*Phaseolus vulgaris*), soybeans, (*Glycine max*), melon (*Cucumis melo*), green pepper (*Capsicum frutescens*), cucumber (*Cucurbita pepo*), banana (*Musa sapientum*), and plantain (*Musa paradisiaca*).

1.2 Western Highlands

For the purposes of the project, this zone is made up of the departments of Quetzaltenango and Totonicapán, but Sololá could also be included. The dominant climate is very humid low mountain; the temperatures vary to a great degree according to the season, from 0 to 25 degrees centigrade; the topography is rolling or very hilly, and the soil is generally sandy-loam or clay-loam, and often very eroded.

Since maize (*Zea mays*) is the principal food crop in the diet of the western highlands' indigenous population, this crop is the predominant cultigen. Nevertheless, in contrast to the other region, there is a certain degree of crop diversification due to the horticultural production typical of this zone.

Among the various crops of this region are found wheat (*Triticum vulgare*), vegetables such as carrots (*Daucus carota*), beets (*Beta vulgaris*), onion (*Allium cepa*), cauliflower (*Brassica Olerace*, var. *capitata*), lettuce (*Lactuca sativa*), fava beans

• The project is not currently working in the department of Escuintla.

• According to classifications based on the Holdridge system.

(*Vicia faba*) fruit such as apples (*Malus comunis*), pears (*Pirus comunis*), plums (*Prunus domestica*), and flowers such as wallflowers.

1.3 Eastern Area

The initial phase of the project takes place in the department of Jutiapa as the principal area, as well as Santa Rosa and Jalapa. The dominant climates are dry sub-tropical and humid sub-tropical; temperatures are moderate, ranging from 16 to 34 degrees centigrade. The topography is varied and includes flat areas and very hilly or inclined areas, with rocky soil over volcanic matter, of clay-loam and silty-loam texture.

As in the other 2 regions, maize (*Zea mays*) is the principal crop; second in importance is black beans (*Phaseolus vulgaris*) and third is sorghum (*Sorghum vulgare*). In general the planting system of this area is based on these 3 crops, combining maize and beans in the first planting and maize and sorghum in the second. On a smaller scale we find sesame (*Sesamum indicum*), tomato (*Lycopersicum sculentum*), green pepper (*Capsicum frutescens*), watermelon (*Citrullus vulgaris*), melon (*Cucumis melo*), peanuts (*Arachis hypogea*), cucumber (*Cucurbita pepo*), radishes (*Raphanus vulgaris*), coffee (*Coffea arabica*) papaya (*Carica papaya*), and others.

2. Current Agricultural Situation

Fulfilling the objectives of the project, which are to promote development and agricultural modernization, to increase union members' income, and to raise their standard of living, will depend on knowledge of the current situation regarding agricultural production, knowledge of the existing limitations and potential, the efficacy with which technology is transferred, and the effective control over the marketing of the products. We have data from interviews with farmers as well as the surveys carried out by the agronomy team with 146 union member peasants (50 in the southern coastal area, 47 in the western highlands, and 49 in the eastern area) to help analyze these issues.

2.1 Size and Land Tenure

In order to understand the union members' production conditions, the study proposed, first of all, to determine the size of the plots the farmers worked and the most frequent kind of land tenure in each of the studied regions. Before analyzing the production details of each region, a very important general fact to understand is the size or extension of the cultivated

land. In order to do this it was necessary to consider that in the three regions, albeit not in equal proportion, members cultivate not just one plot but generally more than one.

The data obtained for the current year is presented in the table below. Note here that this data corresponds to members who work any size plot, regardless of land tenure, and that in the eastern area 18.37% of the 49 interviewees reported not working any land at all. In the southwest and west, this figure is much lower (6% and 4.25% respectively).

TABLE 36: SIZE OF LAND WORKED/1987

MANZANAS (7 hectare)	Southern coast*		West*		East*	
	Plot 1	Plot 2	Plot 1	Plot 2	Plot 1	Plot 2
0.01-0.20	4.26	----	47.83	32.61	22.50	2.50
0.21-0.40	2.13	----	17.39	4.35	25.00	25.00
0.41-0.60	4.26	----	10.87	2.17	17.50	10.00
0.61-0.80	12.76	----	2.17	6.52	12.50	2.50
0.81-1.00	4.26	2.13	8.70	4.35	7.50	2.50
1.01-2.00	27.65	8.51	6.52	4.35	10.00	5.00
2.01-5.00	34.04	8.51	4.35	2.17	2.50	---
5.01-10.00	6.38	----	2.17	----	-----	---
10.01-20.00	2.13	4.26	-----	----	2.50	---
More than 20.00	2.13	----	-----	----	-----	---
	100.00	23.41	100.00	56.52	100.00	47.50

* Percentages of regional sampling. Valid responses 133

In reviewing the previous information, two facts merit attention: a) the relative size by region of the plots worked, and b) the need to work additional land.

In the Southern coastal region, plots worked by 61.69% of members are between 1 and 5 manzanas, and of these members 55.17% work more than 2 manzanas of land. In striking contrast is the western region, an area of extremely small land holdings, a situation which is worsened every generation by constant family reapportioning of land. In this area 86.96% of those surveyed work less than 1 manzana; of these at least 55% work less than 0.2 of a manzana. The eastern region would appear to be similar to the west: 85% of those surveyed work less than 1 manzana, but the distribution within this size grouping is more uniform. Nonetheless, 47.5% of those surveyed in the east work less than half of a manzana.

It is no wonder that due to the small land holding situation in the west, more than a half of those surveyed (56.25%) find it

necessary to work additional plots of land. In the east this proportion is similar (47.5%) while in the southern coastal region, where at least 72.33% work more than 1 manzana, only 23.41% work additional plots.

TABLE 37: LAND TENURE/1988

TYPE OF TENURE	So. Coast*		West*		East*	
	Plot 1	Plot 2	Plot 1	Plot 2	Plot 1	Plot 2
Inherited	20.69	-----	15.28	1.39	18.64	3.39
Purchased	25.86	1.72	38.89	15.38	32.20	1.69
Rented	20.69	17.24	4.17	16.66	10.17	18.64
Borrowed	-----	-----	-----	1.39	1.69	3.39
Usage rights	-----	-----	-----	-----	1.69	1.69
Family land	13.80	-----	5.55	1.39	3.39	3.39

* Percentages of number of plots worked. 189 valid responses.

With regard to the tenure of land worked in 1988, the percentage of land owners, whether through inheritance or through purchasing, is: 48.27% in the southern coast, 70.84% in the west, and 55.92% in the east. It is not surprising, then, that the percentage of rented land is highest in the southern coastal area (37.41%). According to the members surveyed in this area, the rental price ranges from Q.140 to Q.200 per manzana per year, depending on location, soil quality, water sources, roads and accessibility, etc. Payment is made generally at the time of harvest. Farmers who neglect to pay are left without a plot for the following season or they are forced to rent elsewhere.

In the western highlands, by contrast, the majority of farmers work their own land, which are most frequently 1/16 to 1/2 of a manzana (437.5 to 3,500 square meters) in size, according to interviews and surveys. Currently maize is the predominant crop among peasants. The small size of plots and the poor return usually received from corn makes this situation ideal for converting farmers to high profit cash crop diversification through the project.

As is shown in table 36, many of the owners in the eastern region have small plots of land forcing them to rent additional plots to cover their production needs, while others only rent land and must face the annual decrease in available land and the constant increase in rental price. This currently fluctuates between Q.70 and Q.150 per manzana per year, depending on the

quality and location of the land. Some places have a system of community land. In others, there is a system of community land whereby the peasant simply has use of a plot for a nominal annual fee between Q.3 and Q.6 per manzana. These lands are usually owned by the municipality of the region.

2.2 Production Technology

The use of paid labor in agricultural work is limited by the availability of land and of capital, in addition to the difficulty in finding labor and the constant rise in the value of the paid work day. A disadvantage for the farmer is that the day laborer no longer works an 8-hour day, but rather 6 hours, which results in a substantial increase in production costs.

In the southern coastal area, contracting labor is a problem for the producer: in the first place, it is difficult to find available workers, in the second, the value of the work a day is constantly rising. Current prices range from Q.4 to Q.6 for a 6 a.m. to 12 p.m. work day.

In the western highlands the situation has resulted in what local farmers call "a hand for a hand"; this refers to mutual help in working the land without charging each other for the work done for each other. When it is necessary to hire extra labor, it is generally paid by the job instead of the day, which results in higher production costs. For example:

Preparing land	Q.15/cuerda of 25 varas=	Q.240/mz
Planting maize	Q.7/day or Q.5/cuerda =	Q.80/mz
Transplanting onion	Q.24/cuerda =	Q.384/mz

In the east, paid labor is difficult to find, and its current cost is at least Q.5 per day. On occasion, when the need has been urgent, people have worked on a mutual help basis.

The questionnaire enabled us to determine that of the 146 peasants who make up this sampling, only 49 (33.56%) use some soil conservation method. The area in which soil conservation techniques are used more frequently is the eastern region, where 61% of those surveyed responded affirmatively to the question. Nevertheless, this figure corresponds to only 20.55% of the total sampling. In any case, the reality of the situation in the east is such that technical assistance is very limited, which means that the methods used are generally empirical. Those farmers who do use the methods have generally learned them from their fathers. In the West, 31% of those surveyed used some type of soil conservation (10.27% of the total sampling), while in the southern coastal region 8% (2.74% of the total) conserve the soil by some means. The conservation methods used by the 49 members are described below in table number 38.

TABLE 38: SOIL CONSERVATION METHODS USED

METHOD	%	REGION		
		S. O. Coast	West	East
Contour plowing	53.06	2.04	12.24	38.78
Barriers (Weeds or waste)	18.37	6.12	-----	12.25
Terraces	16.33	----	14.29	2.04
Ditches/ruts	6.12	----	2.04	4.08
Canals	6.12	----	2.04	4.08
N= 49	100.00	8.16	30.61	61.23

The use of irrigation methods is even more limited; only 9 members (6.16% of the total sampling) reported having used them. Once again, of these the majority were to be found in the eastern area (66.66%), but this figure is actually minimal, representing only 4.11% of the total sampling.

One of the most important questions in the agronomic survey was whether or not, in the farmer's opinion, it was feasible to use irrigation in the area. Of the 142 valid responses 58.45% considered that it was possible to irrigate. The responses are divided among the region as shown in the following table:

TABLE 39: POSSIBILITY OF USING IRRIGATION BY REGION

	REGION		
	So. Coast*	West*	East*
Yes it would be possible	73.47	64.44	37.5
No, it would not be	26.53	35.56	62.5

* Percentages of regional sampling. Valid responses: 142

Only 40 interviewees (27.39%) reported having used, at one time or another, some non-traditional method of agricultural production such as tractor or yoke. Of this group, 72.5% are found in the southern coastal area where the plots of land are

larger, 25% in the eastern region, and only 2.5% in the western region. This last figure is not surprising considering the small plots of land characteristic of this area.

TABLE 40: USE OF NON-TRADITIONAL PRODUCTION TECHNIQUES

METHOD	%	REGION		
		So. Coast	West	East
Yoke	27.50	7.50	-----	20.00
Tractor	70.00	65.00	2.50	2.5
Both	2.50	-----	-----	2.5
N = 40	100.00	72.50	2.50	25.00

With regard to the use of pesticides, of the 141 valid responses, 62.41% were affirmative, of this group 48.86% are to be found in the southern coastal region, 35.23% in the east, and 15.91% in the western highlands. The use of pesticides is divided by region in the following manner:

TABLE 41: USE OF PESTICIDES BY REGION

	REGION		
	So. Coast*	West*	East*
Use	86.0	33.33	63.25
Don't use	14.0	66.67	36.73

* Percentages of regional sampling. Valid responses: 141

Among the farmers surveyed, the principal reason for not using pesticides is the lack of money needed to acquire them. Nevertheless, many members, especially in the western region, stated that pesticides are unnecessary and that they did not know how to apply them in any case. In determining which pesticides were more frequently used by members, and keeping in mind that those who use pesticides use more than one kind, the questionnaire elicited multiple responses. The distribution of these 160 responses is as follows:

TABLE 42: MOST FREQUENTLY USED PESTICIDES

		%	REGION		
			So. Coast	West	East
Gramoxone	(H)	22.50	11.87	-----	10.62
Tamaron	(I)	19.37	11.87	2.50	5.00
Volaton	(I)	13.12	9.37	1.25	2.50
Folidol	(I)	8.12	3.75	0.62	3.75
Edonal	(H)	8.12	1.87	-----	6.25
Lannate	(I)	5.62	5.62	-----	-----
Antracol	(F)	5.00	0.62	3.75	0.62
Aldrin	(I*)	3.75	3.12	-----	0.62
Gexaprin	(H)	3.12	2.50	-----	0.62
Banvel	(H)	1.87	-----	1.87	-----
Malathion	(I)	1.87	0.62	-----	1.25
Afalon	(H)	1.25	-----	1.25	-----
Poliram	(H)	1.25	1.25	-----	-----
Lorsban	(I)	1.25	1.25	-----	-----
Cupravit	(F)	0.62	0.62	-----	-----
Perfectidem	(I)	0.62	0.62	-----	-----
Tribunil	(H)	0.62	-----	0.62	-----
Agallol	(I)	0.62	0.62	-----	-----
Manzate 200	(F)	0.62	0.62	-----	-----
Lebacyd	(I)	0.62	-----	-----	0.62

H= Herbicide 56.19 11.86 31.23
 I= Insecticide
 F= Fungicide
 I*= Sale of this insecticide is prohibited

Among the members who use or have used these products, the safety measures taken are almost nonexistent: Only 7 of them (7.95%) use "some" type of protection, but never a mask or gloves when applying or handling the insecticide. However, cases of pesticide poisoning have been infrequent. Only 5 interviewees (5.68%), all of them from the southern coast, stated they had suffered some kind of poisoning problem at some point, and all of the cases seemed to be accidental (for example, a pump bursting or a product spilling). Apparently members are aware of the potential dangers of an empty pesticide container, since most of them (88.04%) discard the containers. Nevertheless, the majority (36.96%) simply throw them out without destroying them first. Among, 5.43% re-use them to store pesticides, and 6.53% sell them or save them for no apparent use, all of which are potentially dangerous situations.

The planting of improved seeds is very limited among those surveyed; of the 141 valid responses, only one third or 34.04% answered affirmatively to this question, among these, 97.92% believe that using improved seeds significantly increases production. The use of improved seeds is distributed among the regions as follows:

TABLE 43: USE OF IMPROVED SEEDS IN PLANTING BY REGION

	REGION		
	So. Coast*	West*	East*
Use	58.00	27.90	14.58
Don't use	42.00	72.10	85.42

* Percentage of regional sampling. Valid responses: 141

Only 19.86% of those surveyed had at some point done a soil analysis 55.17% of these pertain to the eastern region, 27.59% to the southern coast, and 17.24% to the western highlands. Of the total sampling, however, the percentages of 10.96% in the east, 5.48% in the southern coast, and only 3.42% in the western highlands, are not really significant.

DIGESA has carried out 44.83% of the soil analysis of the 29 reported cases. 34.48% of the farmers did not carry out the results of the analysis for a variety of reasons including lack of money and lack of time. However, 13.79% never received the results from DIGESA.

In the southern coastal area, almost all the farmers interviewed had some knowledge of fertilizers and of the advantages of their use, but many stated that they had used fertilizers for the first time this year when the project provided them on a credit basis. On the other hand, farmers who had applied fertilizers in the past have been gradually decreasing their use due to the constant rise in prices.

In the west, the techniques practiced by the farmers are in keeping with traditional methods of the highlands, but the difference with the other regions is to be found in the greater agricultural diversification characteristic of the west; these include certain techniques which improve quality and production. Clearly technical assistance and efficiently programmed credit would provide the peasant greater benefits and advantages.

In the east, technical assistance and credit are extremely important in achieving better production, due to the fact that the farmers' technical abilities and economic capacities are quite deficient. The majority stated they had never received assistance of this kind - their methods are largely empirical.

2.3 Agronomic aspects of the most important crops

We have already noted the characteristic crops of each region in the agro-ecological description. The results of the survey are found in the following table:

TABLE 44: DOMINANT CROPS BY REGION

CROP	REGION		
	So. Coast*	West*	East*
Maize	96.00	91.49	97.96
Sesame	58.00	-----	-----
Fruit	14.00	-----	-----
Vegetables	-----	23.40	-----
Wheat	-----	12.76	-----
Beans	2.00	2.13	44.90
Sorghum	2.00	-----	30.61
Coffee	-----	-----	12.24
Rice	8.00	-----	2.04
Peanuts	4.00	-----	-----
Cocoa	2.00	-----	-----
Sugar cane	-----	-----	2.04

* Percentages of regional sampling

Before describing the regional agronomical characteristics for each crop, it is necessary to point out that both the interviews and the questionnaire were carried out before the 1988 harvest had been completed. For the most part, therefore, the general estimates for each crop field are based on the 1987 harvest.

In referring to past harvest, only 37.96% of those interviewed consider production levels adequate. The area of greatest dissatisfaction is the east (68.08%) but in all three regions more than half of those interviewed stated that production levels did not meet their expectations.

There were many reasons stated for this, and there is no regional homogeneity in this regard since the majority of farmers referred to climatological conditions as the principal factor. In this sense, the east seems to be the most susceptible to changes in climate. In this region 61.54% of those interviewed consider lack of rainfall the most important obstacle. However excessive precipitation in the 1988 rainy season has been causing plant losses due to excessive humidity, flooding of fields, and

proliferation of crop disease. Farmers in this area base nearly their entire agricultural production on three main crops: maize, beans, and sorghum. Diversification is rare and therefore their ability to compete in the market place is greatly reduced.

It is important to note that although excessive or insufficient rainfall greatly hinder agriculture, very few interviewees referred to plagues or disease as an obstacle to production, despite the fact that the mosaic virus greatly affects bean cultivation. This disease spreads under any climatic condition. From the farmers' point of view, it is climate, not the virus, that causes crop loss in beans especially when there is no technical assistance.

In the southern coastal region, 41.67% of those interviewed stated that the principal negative factor in production was excessive rainfall, presumably referring to the sesame crop, specifically the 1988 crop. It is possible that during this year, the yield for this crop will decline approximately 10% due to the harsh rainy season, which in some cases has been completely lost. In the west, the lack of rain affected 32% of the farmers interviewed.

The only factor almost consistently mentioned in the three regions is the lack of fertilizers. Whether this is because the quantity loaned by the project is insufficient (see section on Loans for Agricultural Production), or because the farmers are not accustomed to fertilizing, this factor proportionately affects crops to a considerable degree. In the west almost one-third of those interviewed mentioned it as the principal cause of low production.

2.3.1 Maize (Zea Mays)

Maize continues to be the predominant crop in the three areas studied, if we consider family consumption and not sale as the determining factor. The agronomical characteristics of this crop such as planting methods, fertilization, plagues and disease, disease and weed control practices, stalk bending, and harvest techniques, vary little from region to region. There is generally a marked technological deficiency among CUSG peasants, and the productive process is carried out in traditional and empirical ways.

The most commonly used seed is non-hybrid which the farmers select from their own harvest. Some have acquired certified seed on occasion, but they plant them continuously and this causes progressive genetic and productive degeneration. Another common practice is to acquire seed from a neighbor, without any control or technical supervision, which has the same results.

The planting method used is "mateado": for individual plants or shoots, with 5 to 8 seeds per position, at a distance of 0.9 to 1 meter between rows, and 0.4 to 0.5 meter between plants, depending on the crop to be interspersed with the planting. 25 to 30 pounds of seed are used per manzana.

The planting season varies from region to region. In the southwest, where the soil has no residual humidity, it is done between May and June depending on the start of the rainy season; in the western highlands planting season is from February to March in soils with sufficient humidity, and in the east, between May and June when rainy season begins.

No consistency was found in the use of fertilizers: some farmers do not use them, some only apply reduced quantities or an incomplete nitrogen formula, and the rest fertilize with a complete formula. The most common formulas are 20-20-0, 16-20-0 and 1-15-15 in doses that range between 2 and 6 quintals per manzana in one application 30-40 days after planting.

When urea is used (46-0-0) the dose is 1 to 1 1/2 quintals per manzana. Some farmers use urea only because it is the least costly formula, and according to them, the same results are obtained. It is applied before the onset of flowering.

A current practice is to fertilize maize with a foliage fertilizer only, which diminishes production and which is evidence of the lack of technical knowledge in the use of these inputs.

Many pests infest this crop; the most common are *Phytophaga* Spp, *Agriotis* Spp, *Laphygma frugiperda*, *Diatraea saccharalis*, *Diabrotica* Spp, and others of minor importance. To control these pests, agrochemicals such as Volaton, Aldrin, Tameron, and Lannate, are used. In some cases these pests are not controlled by the farmers due to the lack of economic resources needed to purchase pesticides.

To control weeds manual weeding is carried out with a hoe and herbicides such as Gexaprim and Gramoxone are applied in doses of 1 liter per manzana, depending on the size and spread of the weeds.

Stalk bending and harvesting are carried out by hand by the farmer's family, except when the area is extensive. Yields vary from region to region depending on the farmer's technical capacity and the agro-ecological condition of the plot. Generally but somewhat optimistically, yields per region are as follows:

Southwest	40-64	quintals per manzana
Western Highlands	25	quintals per manzana
East	15-40	quintals per manzana

Survey questionnaire results regarding 1987 maize production are presented in the following table:

TABLE 45: ANNUAL MAIZE PRODUCTION-1987

QUINTALS	REGION		
	So. Coast*	West*	East*
1- 20	12.50	60.97	27.08
20- 40	14.58	24.39	35.42
40- 60	2.08	4.88	27.08
60- 80	16.67	4.88	-----
80-100	16.67	4.88	4.17
100-120	20.83	-----	2.08
200-300	10.42	-----	4.17
More than 300	6.25	-----	---

* Percentages of regional sampling. Valid responses: 137

We see then that in the western region 85.36% of the farmers interviewed had an annual maize production of less than 40 quintals; in the east the production of 89.58% of the farmers was less than 60 quintals. In this region the lowest yields (8 to 10 quintals per manzana) occurred in cases where the farmers did not fertilize and used non-hybrid seed. In the southern coast, where more than half of the farmers surveyed own between one and five manzanas, maize production varies from high to low ranges, but a good number (70.84%) have produced more than 60 quintals. It must be noted, however, that in this area two crops a year are produced and that the majority of farmers are dissatisfied with the production of both.

2.3.2 Sesame (*Sesamum indicum*)

The first phase of this project has included promoting sesame due to the fact that it is an export crop which offers quite acceptable marketing guarantees. By the same token, the project has attempted to increase yields by providing inputs and technical assistance to the member farmers.

Sesame can be cultivated in hot tropical and sub-tropical climates, for which reason the pacific coast offers the most adequate conditions for its cultivation. The most common varieties are called "Maporal", "Cuyumaqui", and "R198"; "Blanquina" and "Chicote" are less frequently found. Buyers prefer the "R198" variety for its uniformity and white color as

these qualities make it more acceptable on the international market. Seeds from the other variety are more mixed and darker in coloring, which makes them less acceptable.

Despite the qualities of "R198", excessive rainfall in the rainy season of 1988 caused serious losses in some areas. This variety was found to be very susceptible to excess humidity and to the rotting of stem and roots caused by the "Fusarium Oxysporium" fungus. This problem forced some farmers to carry out up to three re-plantings and some lost their harvest altogether.

According to those who were affected, the "Maporal" variety is more resistant to humidity and to the disease; furthermore, many farmers would have preferred that the project provide them with this seed rather than R198 seed.

Sesame planting is done manually after bending the maize stalk, using 6 pounds of seed per manzana in separate holes with 6 to 12 seeds per position. Prior to this, raking or weeding of the rows of maize is carried out manually or else Gramoxone is applied in doses of 1 liter per manzana. The majority of farmers do not conduct a thinning out ("raleo") after the sprouting of the plants.

This year the participants of the project used 2.2 quintals of 15-15-15 fertilizer per manzana. Some farmers do not fertilize and others only use urea (46-0-0) in doses of 1 to 2 quintals per manzana. There is also a general use of foliage fertilizer--Baygolan or Nitrofoska--in doses of 1 liter per manzana and 2-3 applications per planting cycle.

Besides the disease of stem and root rot mentioned, other pests infest this crop on an minor scale. These include Diabrotica Spp, Loxa viridis, etc. The same pesticides used in maize are applied to sesame.

In 1987, of the 29 farmers who cultivated sesame, 44.83% obtained an annual production ranging between 10 and 20 quintals. Yields ranged between 8 and 16 quintals per manzana. This year some believe they will obtain only 3 to 5 quintals per manzana; however, for the 1988 harvest, it will not be possible to evaluate the results of the technology used by the farmers due to damage caused by the rainy season.

In the eastern communities, some farmers have tested planting sesame in small areas, and according to them, they have had good results in terms of adaptability and production. Therefore they would expect some technical assistance to expand their production.

2.3.3 Rice (*Oriza sativa*)

Interest in this crop has diminished among farmers of the southern coastal region due to continuous failures in past years as a result of price instability and the rise in the prices of inputs and agro-chemicals.

The most common varieties of plantings are ICTA Virginia, Super Rice, and Japanese. The farmers select their own seeds from their harvest since the market price for a quintal of certified seed is Q.125.00, which is beyond their economic means.

Yields range between 50 to 60 quintals per manzana, but there have been cases of yields of only 35 quintals per manzana, principally due to lack of rain.

The most common plagues that infest this crop are *Phylophaga* Spp. and adult *Phylophaga* Spp. The same pesticides used in maize are applied to rice.

2.3.4 Sorghum (*Sorghum Vulgare*)

Sorghum is generally a second cycle crop which is planted interspersed with maize after the bending of the latter's stalk. It represents a production alternative for small scale farmers, especially in the east. It is also adequate for the southwest, but it has been largely replaced by sesame.

Non-hybrid seed is selected from the harvest. Planting is carried out in July and August, depending on when the maize stalk is bent. The production process extends to the end of December or beginning of January, which is when harvesting takes place.

When fertilizer is applied, it is done so in a complete formula in doses of 2 quintals per manzana, 25 to 30 days after planting, and one quintal of urea is applied just before flowering. Farmers who do not fertilize believe it is unnecessary because their yields are sufficient; the truth is that it is beyond their economic means to invest in fertilizing their crops.

The pests most commonly affecting this crop are *Phylophaga* Spp., *Atta* spp., and in some cases *Mocis repanda*. When pests become a serious problem, granulated Volaton is applied to the soil or liquid Volaton is sprayed onto the leaves.

Yields range between 12 and 16 quintals per manzana when traditional technology is used.

2.3.5 Beans (*Phaseolus vulgaris*)

Like corn, beans constitute one of the basic staple foods in the Guatemalan diet, especially that of the peasant. However, its cultivation has diminished in many areas, especially in the southern coast and the western highlands due to innumerable pests which have destroyed the crops. These include mosaic virus which is transmitted by white fly (*Bemisia tabaci*) and which has been impossible for the farmers to control. Consequently the information presented here regarding this crop was obtained from farmers in the eastern region.

The seed generally used is non-hybrid seed obtained from the harvest. Beans are planted in May or June, at the start of the rainy season, interspersed among the maize plants; harvesting place takes 3 or 4 months later.

Since it is planted with maize, the same fertilizers are used for both. If this is not done, production will depend only on the quality of the soil, and consequently yields will be much lower. This is proven in comparing yields resulting from both techniques: 3 to 10 quintals per manzana are obtained when fertilizer is used. This is nevertheless a low yield compared to plantings in which appropriate techniques are used: 25 to 35 quintals per manzana. Out of 22 surveyed farmers, 77.27% obtained yields of less than 10 quintals in 1987.

The most commonly occurring pests besides white fly are *Diabrotica* Spp, *Chapelus signaticollis*, *Phyllophaga* Spp., *Apion godmani*, *Vaginulus* spp, etc. The agro-chemicals used to control these pests are similar to those previously mentioned. Other diseases such as Anthracnose (*Colletotrichum lindemuthianum*) and roya (*Uromyces phaseoli*) also plague the bean crop; both of these cause severe losses because generally the farmer does not combat them.

Marketing of beans is also controlled by intermediaries such that the farmer rarely obtains a reasonable price for his product.

2.3.6 Vegetables and potatoes

In the western highlands, the most commonly found cultivated vegetables were carrots (*Daucus carota*), beets (*Beta vulgaris*), cauliflower (*Brassica oleracea*, var. *capitata*), onions (*Allium cepa*), lettuce (*Lactuca sativa*), and fava beans (*vicia faba*).

Seed is obtained from agricultural services in Quetzaltenango or from the nearest town with these services. Some farmers have had sprouting problems with these seeds, especially onions, which could be due to poor seed quality or to

being stored for long time, causing the seeds to lose their viability.

The carrot variety most commonly used by farmers in this area is "Oxheart", which is characterized by its roundness and shortness (farmers call this seed "flat nosed"). The elongated variety, "Chantenay", is also very popular.

5 ounces of seeds are used per cuerda of 25 varas (or 5 pounds per manzana). Yields vary greatly from one farmer to another, approximately 200 to 600 dozen per cuerda (3,200 to 9,600 per manzana) when traditional technology is used, which accounts for the low production levels; normal yields using adequate techniques range between 800 and 900 dozen per cuerda (13,000 to 15,000 dozen per manzana).

Some farmers use 15 pounds of Urea (46-0-0) per cuerda to fertilize (2.4 quintals per manzana); others apply only fresh organic fertilizer (chicken or other manure), but many believe that this causes the carrot root to be small in size, which in turn yields a lower selling price.

To control weeds "Afolon" is applied in doses of 4 ounces per gallon of water, with an average of 4 application per cycle. The most common disease is tizón de la hoja, which is caused by the *Alternaria dauci* fungus and which is combatted by applying Antracol in doses of 2 Bayer scoops (40 grams) in 3 gallons of water. The *Cercospora carotae* fungus also attacks causing mancha foliar.

Another very popular vegetable is the beet (*Betta Vulgaris*) although the technology used is even lower than is used in cultivating carrots. Farmers invest little in this crop and thus have low yields, generally an average of 120 dozen per cuerda of 25 varas (1,920 dozen per manzana). If properly managed, this crop could yield 8 times much as this production.

The planting area per farmer rarely exceeds one-half cuerda (16 pounds per manzana). "Detroit Perfect" and "Crosby Egyptian", seeds are used although generally the farmer does not know the name of the variety he plants. No mention was made of problems regarding plagues or disease, and fertilizer is not generally used. Marketing takes place in the Quetzaltenango market.

Onions (*Allium cepa*) are considered quite a favorable crop although prices vary greatly. Many farmers customarily sell by the lot, from Q.200 to Q.400 per cuerda (Q. 3,200 to Q.6,400 per manzana) in a high supply time of year, and from Q.1,000 to Q.1,200 per cuerda (Q.16,000 to Q.19,000 per manzana) in a low supply/high demand season.

3 to 4 ounces of seed are used per cuerda of 25 varas

(3-4 pounds per manzana). The "Flat nosed mexican" variety is most commonly used for producing stemmed onion. Planting and preparation of seedlings are carried out using family labor, while transplanting is contracted and paid by the job. Some farmers apply organic fertilizer (manure) and Urea (46-0-0) in quantities of 2 quintals per manzana.

The principal disease affecting onion crops is caused by the *Urocystis cepulae* fungus and is commonly known as "carbón" or "tizón". Dithane or Antracol are used to combat this and sometimes a combination of both is used.

Average yields range between 350 and 600 quintals per manzana which is considered within the normal production level range.

The other vegetables mentioned, such as cabbage, cauliflower, lettuce, and fava beans, can be considered part of the western highlands small-scale farmer's plan to diversify his crops in an attempt to increase his income and improve his family's standard of living. Yields are generally below normal production levels due to his limited technological awareness, his low economic level, and the intermediaries' control of the market.

Potatoes (*Solanum tuberosum*) are quite profitable for the highland farmer, when he is able to obtain an adequate price. Lately there have been problems with seed quality; according to symptoms described, seeds with mosaic virus are being sold. These seeds have been obtained in Concepción Chiquirichapa from unregistered seed vendors. This situation has caused nearly total losses, and only 2 quintals per cuerda (32 quintals per manzana) were obtained. Normal yields range between 30 and 35 quintals per cuerda (480 to 560 quintals per manzana).

Currently the commonly used potato variety is "Tollocan" because it is more resistant to *Phytophthora infestans*; 2 applications of Antracol are sufficient to keep the crop disease-free.

2 to 2.5 quintals of seed are used per cuerda (32 to 40 quintals per manzana), planted at a distance of one-half meter between beds and two-tenths of a meter between plants. Recommended quantities are 1 to 1.5 quintals of seed per cuerda (16 to 24 quintals per manzana) planted eight to nine tenths of a meter of a meter between beds and one-fourth to one-third of a meter between plants. Of one quintal 15-15-15 fertilizer is used (16 quintals per manzana), between 2 applications; the first at planting time and the second 30 days later. When the plants are fully grown, 50 to 60 days after planting, 2 quintals of 20-20-01 per cuerda are applied to individual plants.

2.3.7 Flowers

In the community of Chicué, Quetzaltenango, we found that peasants were growing wallflowers in addition to traditional crops and vegetables, probably because this crop has quite attractive benefits due to its high profitability and its low investment. 30 to 32 ounces of seed are used per cuerda (30 to 32 pounds per manzana). Growing time is 4 months, and for this reason the farmers have begun to apply to the government for an irrigation system that would enable them to increase the number of annual harvests.

There have been no major problems with plagues or disease; rotting of the roots, possibly caused by soil fungus (such as *Fusarium* spp.) is being combatted with fungicides to avoid mayor losses.

2.3.8 Other crops

Innumerable crops are produced in the 3 regions which this Project comprises and which farmers plant on a small scale, experimenting with adaptability and searching for new income sources. The more notable ones in the western region are soya (*Glycine max*) and peanuts (*Arichis hypogea*). Peanuts have produced quite good results since the current small production has kept prices stable and adequate, ranging between Q.50 and Q.70 per quintal. Peanuts are planted in pairs of rows between groupings of maize rows. Yields range between 12 and 18 quintals per manzana. The only 2 varieties are differentiated by their size: large, and small or chinese.

There is interest in growing soya beans, but farmers are unaware of their principal productive and vegetative properties, as well as how to market the product. For these reasons they have not grown soya beans commercially.

Other appropriate alternative crops for the southern coastal region include tomato (*Lycopersicum sculentum*), green pepper (*Capsicum frutescens*), watermelon (*Citrullus vulgaris*), melon (*Cucumis melo*), and cucumber (*Cucurbita pepo*).

In the east there is interest in coffee (*coffea arabiga*) and in vegetables appropriate and adaptable to climates ranging from temperate and hot in addition to sesame as previously mentioned.

3. Marketing

For the small-scale farmer, the most critical aspect is marketing his product, particularly due to the local intermediaries' involvement in this process. The farmers surveyed generally do not transport their own crops to market; instead the most common practice is to await the intermediary's (commonly referred to as a "coyote") visit, who naturally pays prices below market value. Only minimal percentages of those surveyed stated that they were satisfied with the prices obtained for their products. The reasons stated for this situation are expressed in different ways but are not mutually exclusive. The reasons most frequently cited are: a) the intermediaries pay low prices, and b) prices decline at harvest time and the income does not compensate for the investment. Given their dependence on the intermediaries, the latter is actually derived from the former.

In the southern coastal region, farmers face the same problems with the intermediaries, but in addition, they claim that they are subjected to the fixing of scales so that these indicate less than the actual weight. Farmers are further subjected to a 10 to 20% discount for "tara": the weight of the packing material. The result is of course that the peasant loses a good percentage of the value of his harvest.

When the farmer tries to sell his own product directly to a farm-buying business, generally located in the capital city, he must first of all pay Q.1 to Q.2 per quintal in shipping costs, and then he is usually offered a low price, subjected to the same discount for the weight of the packing material, and then further subjected to discount for humidity, impurities, broken grains, and so on. All these discounts amount to 30% to 40% of the buying price. To avoid these problems, the peasant generally resorts to selling his product to the intermediary at the price established by the latter. For this year's harvest 77.5% of the farmers surveyed from the southern coast plan to sell their product to intermediaries.

In the western highlands, marketing is the principal problem faced by the farmer as well, specifically due to the prices established by the intermediaries. Farmers generally sell their products in the Quetzaltenango market to wholesale or retail intermediaries. Otherwise they take the product to Almolonga, a municipality of Quetzaltenango, where the intermediaries are often Salvadorans who transport the products to El Salvador and Tapachula, México.

A very common practice in the western highlands is to sell by a determined size lot of the product, such that the intermediary obtains the product before it is harvested. This

way the farmer avoids harvesting and transport costs, but he also receives less income.

Due to the fact that selling to intermediaries rarely yields satisfactory results for the farmer, those surveyed were asked if selling their products as organized groups would increase their chances of obtaining better prices; of 107 responses, 60.75% would prefer to sell as a group, 36.45% would choose to continue to sell individually, and 2.8% had no preference, stating it made no difference. The distribution of these responses by region appears in the following table:

TABLE 46: PREFERENCE FOR SELLING INDIVIDUALLY OR BY GROUP.

	REGION		
	So. Coast*	West*	East*
Individually	19.56	50.00	48.39
By group	76.09	46.67	51.61
No preference	4.35	3.33	--

* Percentages of regional sampling. Valid responses: 107

4. Credit for agricultural production

80% of the group interviewed stated they had never received any credit, mainly due to a lack of knowledge regarding credit institutions, ignorance of the required paperwork and documents, lack of time or simply because they believe they have never needed credit. At least 40% were unaware of the government's financial institutional known as BANDESA (National Bank for Agricultural Development).

Analysis of the credit disbursed to affiliates during 1987 and 1988 for agricultural production is based on data obtained from the survey forms. The following table illustrates how the percentage of credit disbursed has increased considerably from one year to the next, particularly in the southern coastal region and in the east (30% and 28,57% respectively).

TABLE 47: CREDIT GRANTED BY REGION 1987-1988

	REGION					
	So. Coast*		West*		East*	
	87	88	87	88	87	88
Yes	44.0	70.0	40.42	48.94	24.79	53.06
No	56.0	30.0	59.57	51.06	75.51	46.94

* Percentages of regional sampling. Valid responses: 146

The next table shows that CUSG has replaced BANDESA as the principal credit source in all 3 regions. It is necessary to note that credit given by CUSG consists principally in agricultural inputs, mainly fertilizer, and not in cash. It is also important to note that in the southern coast, the best serviced area, 13.64% of affiliates had to use more than one credit source in 1987 and 11.47% needed to in 1988. In 1988, all of the affiliates who received additional loans did so through CUSG, which suggests that the initial loans were insufficient in covering the farmers' agricultural needs. Despite the fact that the western region showed the smallest increase from 1987 to 1988 in loan granted, the increase in CUSG loans was considerable in 1988 (46.91%).

TABLE 48: CREDIT SOURCES BY REGION*/1987-1988.

	REGION					
	1		2		3	
	87	88	87	88	87	88
Family members	9.10	5.70	5.26	4.35	--	3.85
Individuals	9.10	--	42.10	13.01	16.67	7.69
CUSG/Non-Governmental	36.36	62.86	5.26	52.17	41.66	73.08
Cooperative	4.54	5.70	--	4.35	--	--
BANDESA	27.27	14.28	42.10	17.39	41.66	15.28
	86.37**	88.54**	94.72**	91.30**	100.00	100.00

* Percentages of regional sampling.

** Percentages were calculated based on the frequency of using one credit source only.

Of the affiliates in the southwest region who received credit this year, 19 (54.28%) considered it sufficient to cover their needs, while only 4 (17.39%) in the west and 8 (30.77%) in the east, the responses were the same: the quantity of inputs received through loans were insufficient and the farmers did not have the money to buy additional fertilizer due to its high price.

Since loans given by CUSG consist of agricultural supplies instead of cash, an attempt was made to determine what inputs the

farmers would like to receive in the future. Their responses were divided in the following way:

TABLE 49: INPUTS NEEDED ON CREDIT BASIS

	REGION		
	So. Coast	West	East
Seed	25.42	12.29	8.05
Fertilizer	44.50	16.10	12.29
Pesticides	26.27	12.70	4.66
Tools	3.81	1.27	0.42
N= 236	100.00	42.36	25.42
			32.22

Among the affiliates who would need tools the majority of the responses referred to spray pumps for fumigating. There is a small number of "atypical" responses that were not included in the table; these correspond to affiliates whose principal income source is not agriculture such as members of the weaver union in Vásquez, Totonicapán, who would clearly need other kinds of inputs for their work.

100% of those in the southern coast who had not received loans, would like to in the future, while in the western highlands 37.5% of those who have never received loans consider it unnecessary. This could be due to their reduced plots of land or to the fact that they do not expect to receive any loans.

It is interesting to note how the affiliates themselves would make use of the credit in the future. 44.83% of the affiliates in the southern coastal region plan to continue to grow sesame, despite the damage caused by the 1988 rainy season. Of those, 76.92% would plant it interspersed among maize. 21.43% of those interviewed would use the credit exclusively for maize, and 14.28% for maize and rice. In a smaller scale, other suggested crops include fruit (10.7%), peanuts, and cotton (3.57%).

In the western highlands, 52% of the affiliates would use credit to continue growing vegetables and potatoes. Among these, 38.46% would also plant maize and wheat. Only 20% of the affiliates would use the credit exclusively for maize. The majority agree that economic benefits are not obtained from maize, the traditional crop of the small scale Guatemalan farmer. It would appear that in some ways, it would be more beneficial to plant maize and wheat.

In the east, the affiliates would use the credit in more traditional ways: 61.22% of those surveyed plan to use it to plant maize. Of these, 50% would use it to plant beans. Judging

by the responses obtained, the farmers believe the region offers few possibilities for agricultural diversification; coffee is the most frequently mentioned alternative crop. However, coffee was only mentioned by 14.28% of those surveyed, and it was nearly always mentioned in association with the basic staple grains.

5. Economic Analysis

Production costs of the main crops vary according to region, depending on factors such as rental prices for land, labor costs, use of modern production technology, approach to dealing with disease and plagues, environmental conditions, sales prices, etc. An interesting factor is the fact that farmers do not define production costs for each of their crops; they are therefore uncertain if they are obtaining a profit or absorbing losses. Some farmers have estimated their costs, but this does not include their own labor.

According to the information gathered, it is correct to say that the traditional crops produced by peasants for their own consumption and for sale of the surplus (in case of any excess), are the crops with the least profitability and the ones that generate losses instead of economic benefits. This situation is affected by the factors mentioned above, which could be corrected with adequately planned technical assistance and credit.

In analyzing production costs for maize in the southern coastal area, we find that the average price paid by the intermediaries this year was Q.14 per quintal, with an average yield of 52 quintals per manzana.

The average gross income for a manzana of maize was Q.728. The average production for the same size unit using traditional technology is Q.847, which results in a loss of Q.119 per manzana (14%).

To compensate for this loss, the peasant plants other crops intermixed with the maize, and he also plants two crops per season, which generally needs less investment. However, not all peasants can afford to do so.

The situation in the western highlands is similar with regard to maize planting. Although prices this year were somewhat higher in this region at Q.20 per quintal, the average production costs were also higher, sometimes as high as Q.950 per manzana. At an average of 45 quintals per manzana, the gross income is Q.900, which does not cover costs.

The situation is even more critical in the eastern region where yields are lower while sale prices are the same as in the southern coast. Planting also results in losses here.

In the case of sesame, 12 quintals per manzana is the average production level in Retalhuleu, while the production cost for this unit is Q.400. In 1987 the average selling price for the farmer was Q.40 per quintal, which results in a gross income of Q.480 and a net of Q.80 per manzana. This figure is insignificant considering the fact that many farmers only plant one or two manzanas.

Between January and October, 1988, more than 200,000 quintals of processed sesame seed were exported, and more than 150,000 quintals of sesame in its natural state were exported; this represents an income of more than 23 million Quetzales for the country during this period alone. These figures demonstrate the importance this crop could have for Guatemala and for the farmer if an adequate marketing program were established.

In 1987 a quintal of rice sold for Q.25 to Q.30 which was a favorable price for the farmer. However the 1988 price was Q.12 to Q.14 per quintal with which costs of Q.750 to Q.850 per manzana could not be covered. Given this situation, some farmers have decided not to sell and are awaiting better prices.

For sorghum, yields in the eastern region range between 12 and 20 quintals per manzana, although some have gotten as much as 45 quintals, this is still low, however, considering that 50 to 70 quintals can be obtained using adequate technology. At that rate, sorghum is more profitable.

Sale prices are currently between Q.13 and Q.16 per quintal. Peasants spend an average of Q.225 per manzana using traditional planting methods. If we establish an average yield of 16 quintals per manzana, selling for a Q.14 the quintal, there is little net income. If, on the other hand, yields were 45 quintals per manzana, the net income would be substantially higher, amply justifying the use of more advanced technology. Consequently this crop could be an adequate alternative for the small scale farmer/union member.

Beans are the second most important crop for the small scale farmer because of its major role in his daily diet. However, since most farmers do not fertilize this crop, the yields obtained do not allow for adequate income levels. Yields range between 3 and 10 quintals with fertilizer. Costs range between Q.250 and Q.350 per manzana, and intermediaries are currently offering a local price of Q.50 to Q.60 per quintal.

If we establish an average of 7 quintals produced without fertilizer, a selling price of Q.55 per quintal, and a production cost of Q.250 per manzana, this crop shows 35% profitability, even using traditional technology. Of course it would be more

profitable if a more adequate level of technology were used to increase productivity to a more optimum level.

In summary we can say that planting beans is a good alternative for peasants, especially in the eastern region, because in addition to being profitable if planted with adequate technology, it is beneficial to the soil since it replaces nitrogen.

Vegetables and flowers are profitable appropriate crops for small plots of land such as those found in the western highlands. These crops have begun to replace traditional ones. Demand for them in their natural state and for processing and export has been on the increase.

Productivity levels of vegetables are still very low due to the low level of the technology used; however, vegetables represent the best option for the western highlands if adequate technical assistance, credit and marketing assistance is provided. Wallflowers planted in the Quetzaltenango area are another example; according to the information obtained, each 25-varas cuerda (1/16 of a manzana) generates a gross income of Q.1000 - Q.2000 (Q.16,000 to Q.19,000 per manzana) while only Q.300 to Q.400 are spent per cuerda (Q.4,800 to Q.6,400 per manzana). This represents an average net income of Q.750 per cuerda (Q.12,000 per manzana).

It should be noted that farmers produce their own wallflower seeds since the commercial cost is prohibitive (Q.15 per ounce), and they are still able to achieve these levels of productivity and quality.

6. Discussion of results

- a) The Agricultural Production and Marketing Services project is a necessary and key factor in the agricultural and socioeconomic development of the small scale farmers belonging to the unions; its coverage should be expanded in the near future in the western highlands and the eastern region in order to meet project objectives.
- b) Marketing is the principal problem small scale farmers face due to the intermediaries and to the current marketing process. Direct, private, commercial contracts should be explored and promoted, therefore, to alleviate this problem. A thorough study of the most viable marketing alternatives is necessary to select the ones most consistent with the farmers' needs. This should be done before the planting of any crop.

- c) Limitations in farmers' economic and technical capabilities make it impossible for them to substantially improve their productivity levels; special emphasis should be placed, therefore, on technical assistance through practical field demonstrations through which tangible results could be seen.
- d) Diversified production that would help increase farmers' income should be supported, attempting, wherever possible, to promote the reduction of traditional crops areas such as maize; these areas could be used for more profitable crops.
- e) An education and training program in the handling and use of pesticides should be part of any technical assistance; major emphasis should be placed on safety, toxicity, hygiene, mixtures, and residue. Products banned by the proper authorities should be avoided; Aldrin is one such product whose sale and use have been banned since January 1988, while farmers continue to use it. In such cases, support should be sought from the Department of Agro-chemicals in the Plant Health branch of the Ministry of Agriculture.
- f) A carefully structured plan should be established for the distribution of inputs to the unions; this plan would facilitate delivery to the farmers in establishing location, prices, and delivery systems.
- g) The government's participation in the agro-economic development of union farmers has been very limited; support should be sought from the appropriate ministries in technical and marketing assistance.
- h) Growing sesame is a promising enterprise for the union farmer; the program should be continued in the southern coast and should be promoted as a major line in the east, where agro-ecological conditions are favorable for this crop. In the western highlands cultivating various vegetables and wallflowers should be supported, especially in the case of wallflowers, where some farmers already have experience and knowledge about its characteristics.
- i) Combining efforts among unions with a common market should be promoted in order to establish common centers for storage and sales. The union farmers in Quetzaltenango are at this point, but lack the legal and financial assistance to do so.

7. Recommendations

- a) Start the project as soon as possible in the western highlands and the eastern region, promoting vegetable crops and flowers in the former and sesame in the latter.
- b) Make appropriate contacts with local and foreign businesses to ensure the sale of agricultural products obtained from the project.
- c) Place special emphasis on technical and financial assistance through constant and effective supervision of farmers and their crops.
- d) Place special emphasis on the efficient delivery of inputs so that is done with sufficient time and with a maximum of two deliveries.
- e) Intensively promote diversified production systems and the reduction by at least 20% of maize areas to be replaced with more profitable crops, especially in the western highlands.
- f) Avoid the use of banned agrochemicals through a training program in the proper use of chemical products.
- g) Give unions in Quetzaltenango and Totonicapán legal advice and financial assistance to help establish a storage center and sales location for their agricultural products.
- h) Attempt to secure technical assistance from governmental entities by means of more active communication.

C. POLICY STUDY

Among the objectives of the AIFLD/CUSG project, the three which stand out those which intend to: 1) reinforce internal cohesion and the CUSG'S ability to function as a union representative; 2) improve its administrative abilities in the handling of resources, services, and the effective representation of its member's interests; and 3) contribute to the democratic development of the country in such a way that peasants can know and express their interests within a pluralistic, democratic framework. The political aspects of these objectives need to be dealt with since unions have quite a few characteristics which greatly distinguish them from other types of groups or associations.

1. General characteristics of unions

1.1 Organizational structure

The organizational structure of unions is generally articulated in the following manner: a General Secretary, a Records Secretary, a Conflict Secretary, a Financial Secretary, and at times other members. It is interesting to note in the table below, however, that 42.54% of the total area sampling (134 valid responses) are unaware of this structure. Without delving into the reason for this situation we can discern the need for members to receive more union education. This is particularly necessary in the eastern area where the greatest number of persons who are unaware of this union's structure is to be found, 65.96% of those interviewed in this area.

There is generally more knowledge regarding union issues in the southern coastal area. These differences are due to 3 factors: the personal interest that motivates each individual affiliate, the degree of adequacy with which each union functions as a semi-independent group, and the effectiveness of the work carried out by the CUSG promoters in each region.

TABLE 50: IS AWARE OR THE ORGANIZATIONAL STRUCTURE OF HIS UNION

	So. Coast*	West*	East*
Yes	76.09	63.41	34.04
No	23.91	36.59	65.96

* Percentages of regional sampling. 134 valid responses.

Information regarding the number of members was variable, mostly due to the fact that the members themselves are unaware of their exact number. We believe that this is due primarily to the irregularity in their attendance at meetings. According to leaders in the eastern region, some members belong in name only, which implies disinterest or, according to members in the western and southern coastal regions, fear as a result of recent political violence. Nevertheless, we can say that the higher percentages of responses presented these ranges in membership:

21 to 30 members	31.50%
31 to 40 members	15.75%
41 to 50 members	14.38%
51 to 60 members	12.33%

1.2 Founding of the unions

We do not have exact data regarding the founding date for the unions because many members do not know it. According to the members who responded (42.47% of the total), the majority of the unions were founded between 1985 and 1986, which means they have been operating for 3 to 4 years. However this is a very broad estimate since 41.10% did not know the founding date and 16.44% simply did not respond.

The majority, or 54.11%, stated that the local union was started by CUSG promoters and neighbors who clearly had leadership potential; these latter became the first leaders of the groups. 20.55% of those surveyed did not know how the union was founded and 25.34% simply did not respond.

A considerable number of members (56.81%) participated in the organizing of the union, which means they have been members since its founding. 43.18% joined in the course of doing work carried out by the group; this speaks well of these group efforts and simultaneously illustrates the degree to which workers need the benefits offered by membership.

The majority of those surveyed joined the union individually (66.66%), while among those who joined collectively, 94.52% did so as part of a group that was formed expressly for that purpose. The remaining 5.48% of those who joined collectively did so as part of an already existing group. It is important to point out that even after joining the union, there remains a significantly high incidence of individualism among the members. This can be detected in comments made by the members themselves and by observing certain attitudes that remain constant in their behavior. These attitudes are revealed, for example in having joined the union for personal improvement or gain and in not

taking the proper stance in regard to improvement in the collection of dues.

TABLE 51: PARTICIPATED IN ORGANIZING THE UNION OR IT ALREADY EXISTED

	So. Coast*	West*	East*	Total
Participated	23.48	12.88	20.45	56.81
Union already existed	12.12	15.91	15.15	43.18

* Percentages of total sampling. 132 valid responses.

32.87% of those surveyed stated that their union was legalized, 38.37% stated that theirs was not, and the remaining 28.76% did not respond. The union members who know how their union was legalized stated it was accomplished through CUSG, but this was only 13.01% of the total, while the remaining 86.99% did not know. This situation evokes a certain degree of uneasiness among union members. They state that not knowing the legal status of their union could create problems with the authorities as well as mistrust on the part of potential new members.

Between 1985 and 1988 the incidence of new memberships as shown in the data has been increasing. In the southern coastal region 1985 and 1986 show the percentage remaining at 24%, while there is a sharp drop in 1987 to 8%, which then surges to 38% in 1988. In the western region there is a steady increase until 1988 when it drops from 29.79% to 12.77%. In the eastern region it increases annually by an average of 4.08%, until it reaches 26.53% in 1988. All of this would appear to indicate that unions are capable of summoning members since the increase in membership demonstrates the kind of acceptance they have been enjoying among peasants.

TABLE 52: DATE IN WHICH UNION MEMBERSHIP BEGAN

	So. Coast*	REGION West*	East*
1982	-----	-----	2.04
1983			
1984	-----	2.13	2.04
1985	24.00	10.64	14.29
1986	24.00	19.15	20.41
1987	8.00	29.79	24.49
1988	38.00	12.77	26.53
No answer	6.00	25.53	10.20

* Percentages of regional sampling. 126 valid responses.

1.3 Functioning of the unions

1.3.1 Union fees

Responses to questions regarding union fees were varied; there is no clear consensus even among the members of a given union. This could imply a certain degree of disorganization, but not all regions can contribute the same amount due to broad ranges in income. Within each region some unions can contribute more than others due to the higher income level of some of its members, while others are able to contribute less according to their own peculiar circumstances.

TABLE 53: MONTHLY UNION FEE

	So. Coast*	West*	East*
Q. 0.00	20.00	38.30	18.37
Q. 0.25	18.00	17.02	-----
Q. 0.50	18.00	4.26	63.27
Q. 1.00	36.00	2.13	4.08
Q. 1.01 or more	-----	2.13	2.04
No answer	8.00	36.17	12.24

* Percentages of regional sampling. 119 valid responses.

1.3.2 Frequency and place of meetings

The majority of the union members surveyed in the 3 regions stated that their union met monthly (58.72%) or bi-weekly (23.02%) in 1988. It is important to point out that 9.52% stated that meetings were irregular in 1988. In comparison with 1987, 42.87% stated that the frequency did not change, but a considerable number (36.73%) stated that they met less frequently than in the previous year. On the one hand some members complain that information regarding meeting time is inefficiently relayed; on the other hand the complaint is made that some members attend meetings only when they involve credit assistance and not when they involve cooperation within the membership.

TABLE 54: FREQUENCY OF 1988 UNION MEETINGS

	So. Coast*	West*	East*	Total
Weekly	4.76	-----	0.79	5.55
Bi-weekly	8.73	7.94	6.35	23.02
Monthly	20.63	15.87	22.22	58.72
Annually	-----	-----	0.79	0.79
Irregular	1.59	0.79	-----	2.38
No meetings	1.59	0.79	7.14	9.52

* Percentages of total sampling. 126 valid responses.

TABLE 55: IN COMPARISON WITH 1987, DID YOU MEET MORE OR LESS FREQUENTLY IN 1988

	So. Coast*	West*	East*	Total
More	2.04	3.06	10.20	15.30
Less	13.27	11.22	12.24	36.73
Same	15.31	14.29	13.27	42.87
Don't know	2.04	3.06	-----	5.10

* Percentages of total sampling. 98 valid responses.

77.40% of those surveyed responded affirmatively to the question of whether they had a specific place to hold meetings. Based on observation and personal interviews, an estimated 80% of the meetings are held at the local general secretary's home. In some cases this does not affect either the leaders' family or the union activities; in other cases it does affect things to such a degree that the members themselves have been looking for a separate place that will allow them to hold their meetings without troubling anyone.

TABLE 56: IS THERE A MEETING PLACE

	So. Coast*	West*	East*	Total
Yes	30.82	21.92	24.66	77.40
No	2.05	3.42	6.16	11.64
No answer	1.37	6.85	2.74	10.96

* Percentages of total sampling. 130 valid responses.

2. Members' general valuation of CUSG and the unions

2.1 Valuation of the unions

Members generally consider the unions in terms of their own expectations: they expect their organization to deal with such areas as cooperation and credit assistance (inputs and cash), union and agricultural training, a significant increase in their overall knowledge, the raising of their standard of living in general, marketing assistance for their products, and so on. While they recognize the political and economic limitations that directly and indirectly affect CUSG and the unions, they value the role that these organizations might play very highly.

We were able to detect, however, a certain degree of dissatisfaction with regard to the work carried out - or not carried out, as the case may be - by union leadership, CUSG

promoters, and the confederation itself, in the areas of assistance, training, and other union activities. It is said that the aid is insufficient and that too many promises are made and not kept. The most ardent critics state that they are simply being used as support for propaganda and additional income by CUSG leaders, and that they are useful only within the political context. It is important to point out, however, that despite these criticisms, these same people stay on as union members, because, despite everything, they hope to obtain the help offered. Most of these people conceive of the union as a type of savings and loan cooperative.

The union is seen by some as a political group, especially in the southern coastal region where members stand to obtain better conditions for the workers. All of the above commentaries were made by union members to the research teams, coming out in general conversation outside the bounds of the formal survey.

A peasant decides to join the union principally for material reasons. The largest percentage of those surveyed (22.88%) stated that they joined to improve their economic situation; the second largest group (21.18%) did so to receive material assistance and institutional support. Two other groups (15.25% each) joined in order to be organized and to defend their rights; the smallest group (9.33%) joined to obtain inputs and credit. Other reasons include the need to support CUSG and wanting to improve the country generally. In any case the truly representative percentages contrast individualistic ideas and a false notion of unions on the one hand and incipient community-type ideas on the other.

44.69% of the members surveyed believe that the most important reason for the union to exist is to help peasants, presumably through credit and training, and by extension, by raising their standard of living. The second most important reason for the union's existence is to achieve small farmer unity and organization, which would in turn give them greater strength. It should be noted here that what interests members most about the union is not long-range potential benefits such as labor policy or marketing, but rather the immediate material benefits that the union has offered.

Members indicate that the real role of the union on a local level is to organize. Some members state that the only thing the union has done is to gather them in meetings, with no specific plan and often in a disorganized manner. Other members state that the role the union has played up to now has been in giving credit and technical assistance. Secondly, we find two groups of the same size (10.20% each) who state on the one hand that the role of the union is to solve problems and that the union doesn't do anything and lacks the organization to do anything, on the other hand.

TABLE 57: REASONS FOR THE UNION'S EXISTENCE

	So. Coast*	West*	East*	Total
1. Unity, strength, organization	9.73	7.96	8.85	26.55
2. Help for peasants-economic, general	15.93	11.50	17.26	44.69
3. To protect rights	6.64	4.42	8.41	19.47
4. Other	3.10	3.10	3.10	9.29

* Percentages of total sampling. 75 valid responses

TABLE 58: LOCAL UNION ROLE

	So. Coast*	West*	East*
1. Organize, unite	26.00	19.15	20.40
2. Recruit members	6.00	2.13	4.08
3. Solve problems	8.00	2.13	10.20
4. Give assistance	12.00	21.28	14.29
5. Doesn't do anything/disorganized	6.00	4.26	10.20
99. Doesn't know/ no answer/ not applicable	42.00	51.06	40.82

* Percentages of regional sampling. 81 valid responses.

Union members show a confused understanding about what the union is, even as they belong to one. Even on the southern coast where unions are larger and more long-standing, 38% of members surveyed believe it is simply "an organization". A minority of these point out that is also an organization of workers, but they did not have precise knowledge about its objectives. Another 20% plainly conceives of it as a means of assistance. The largest group in the western highlands (23.40%) also believes the union is simply "an organization". In the east 34.69% responded by saying it was a group, which is just as limited as calling it an organization.

TABLE 59: ASKED ON THE STREET "WHAT IS THE UNION"

	So. Coast*	West*	East*
1. Organization	38.00	23.40	22.45
2. Group	18.00	19.15	34.69
3. Means of assistance	20.00	17.02	20.41
4. Doeen't know	6.00	6.38	-
5. Nothing	-	2.13	-
99. No answer/not applicable	18.00	31.91	22.45

* Percentages on regional sampling.

2.2 Reasons and advantages in belonging to a union

According to 33.33% of members surveyed they joined the union in an effort to protect their rights; 31.03% joined in an effort to raise their standard of living; and 27.59% joined to obtain help and support. Reasons for joining vary according to region.

Among the advantages in joining, 30.22% mentioned economic improvement, and access to inputs and credit; 18.22% mentioned strength, organization, and unity as advantages in joining. However, 41.86% of those surveyed reiterated that for their particular situation, the advantage in joining is the reason mentioned above, namely economic improvement and access to inputs and credit.

TABLE 60: PRINCIPAL REASONS FOR A WORKER TO JOIN THE UNION.

	South Coast*	West*	East*	Total
1. Support, assistance	6.90	6.90	13.79	27.59
2. Improvements	13.79	5.73	11.49	31.03
3. Organization, unity	3.45	---	4.60	8.05
4. Protection of rights	6.90	14.94	11.49	33.33

* Percentages of total sampling. 87 valid responses.

TABLE 61: ADVANTAGES FOR WORKERS IN JOINING THE UNION.

	South Coast*	West*	East*	Total
1. Strength, organization, unity	7.56	4.44	6.22	18.22
2. Training	3.11	1.79	4.88	9.78
3. Economic improvement, access to inputs and credit	11.11	7.11	12.00	30.22
4. Respect and protection of rights	5.33	8.44	3.56	17.33
5. Support, assistance	6.67	2.22	4.44	13.33
6. Other	3.11	3.56	4.44	11.11

* Percentages of total sampling. 76 Valid responses.

TABLE 62: THE ADVANTAGE THAT MOST REPRESENTS YOUR OWN SITUATION IN THE UNION.

	South Coast*	West*	East*	Total
1.	6.98	3.49	3.49	13.96
2.	1.16	4.65	3.49	9.30
3.	15.12	10.46	16.28	41.86
4.	3.49	3.49	2.32	9.30
5.	8.14	3.49	2.32	13.95
6.	1.16	4.65	5.81	11.62

* Percentages of total sampling. 86 Valid responses.

2.3 Services offered by the union

Basically services offered by the union remain about the same in all 3 regions. In the southern coastal area, 28% of those surveyed received inputs, 26% received technical-agricultural assistance, and 24% received credit assistance. In the western region credit and technical-agricultural assistance (19.15% each) are followed by help with inputs (17.02%). In the east, 42.86% received this assistance, technical/agricultural assistance follows with 24.49%, and 16.33% claim that the union does not offer anything.

It is important to note that 6 people in the southern coast, 2 in the west, and 8 in the east (10.96% of those surveyed) claim that the unions do not perform any services except to made offers while nothing comes through. Members surveyed consider the following the most important services: inputs (22.04%), technical/agricultural assistance (21.60%), and credit (18.40%). The next closest category is collective improvement (13.60%). Other services appear on the list but on a much smaller scale: group organization (8.60%), protection of rights (4%) marketing assistance (4%) and political orientation (1.60).

2.4 Training

Persons interviewed clearly favor additional effective training for leaders and members in the areas of union education and technical agricultural matters. Such is the case that 98.48% of the 132 valid responses ask for such training for leaders. It is important to point out that serious differences in the leaders' training levels were observed in the eastern region, compared with the other areas visited. The combination of these 2 factors make serious training for union members a priority in the east. It was possible to observe that the reasons for this discrepancy are the greatest degree CUSG promoters organization in the other areas, and the socio-political situation of each area and its inhabitants.

In personal interviews it became clear that the leaders have a strong overall understanding of the reason for the unions' existence. However, according to some of the members, many of them do not know exactly what their responsibilities are. As a result, the type of training suggested for the leaders would include the functions of the unions, their objectives, etc. (25.34%). Additional training and orientation are also suggested with regard to specific job descriptions (21/23%). A marked percentage of people did not know how to respond to the question regarding training for leaders (19.18%), and another group suggested the training be in agricultural areas (10.27%). This information is made clear in the following table:

TABLE 63: TYPE OF TRAINING NEEDED BY UNION LEADERS

	So. Coast*	West*	East*	Total
1. Training orientation	4.79	4.79	11.64	21.23
2. Discipline	0.68	----	0.68	1.37
3. Agriculture	4.11	3.42	2.74	10.27
4. Policy	0.68	----	2.74	3.42
5. Organization	1.37	0.68	2.05	6.16
6. Union	10.27	6.85	8.22	25.34
7. Human and Social	2.05	2.05	2.05	6.16
8. Do not know	4.11	1.37	----	5.48
9. It depends on the person	----	2.05	1.37	3.42
99. No answer/not applicable	6.16	10.96	2.05	19.18

* Percentages of total sampling. Valid responses: 118

A large percentage of people are in favor of technical training for members, especially with regard to agricultural training. The areas mentioned included crop diversification, soil types, crop improvement, use of herbicides, insecticides, fertilizers and seeds. It should be mentioned that in the southern coastal region, 100% of those who responded considered agricultural training a priority. However, a large percentage of people did not respond because they did not understand the term "technical training" even when it was explained to them.

In all regions, training is very necessary for the union and the community in general. In regional percentages training in union roles and functions was requested by 22% of those in the southern coast, 17.02% in the west, and 20.41% in the east, making a total of 36.71% of valid responses. This is only 19.86% of the total sampling but this is due to the high number of people who do not respond to this question (45.89%). This indicates that there still is not sufficient knowledge regarding what it is the union should be doing.

TABLE 64: TYPE OF TECHNICAL TRAINING NEEDED BY UNION Members

	So. Coast*	West*	East*
1. Agricultural, in general	66.00	40.42	48.98
2. Crafts	-----	8.51	-----
3. Organization	-----	2.13	10.20
4. Loan Management	-----	-----	-----
5. Education	-----	2.13	8.16
6. Electricity	-----	2.13	-----
99. No answer/not applicable	34.00	44.68	32.65

* Percentages of regional sampling. 95 valid responses.

The lack of training is clearly counterproductive, as it can be shown that the majority of people believe that the union is simply a savings and loan cooperative. This idea is quite different from the actual needs of the members and from the conception that the CUSG promoters are trying to impart.

TABLE 65: TYPE OF UNION TRAINING NEEDED BY MEMBERS

	So. Coast*	West*	East*
1. Organization and Union Action	8.00	6.38	6.12
2. Teamwork	2.00	2.13	-----
3. Role of the Unions	22.00	17.02	20.41
4. Union and/or group discipline	4.00	-----	4.08
5. Policy	4.00	-----	6.12
6. Communal	4.00	6.38	10.20
7. Meetings, talks, courses in general	10.00	10.64	18.37
99. No response/not applicable	46.00	57.45	34.49

* Percentages of regional sampling. 89 valid responses

2.5 Knowledge of CUSG

59.59% of those surveyed confirmed knowing what CUSG is. It is ironic that a fairly large group of members do not know what CUSG is even while their unions belong to it. The eastern region has the largest group of members in this category with 48.97%, followed by the southern coastal region and the western region with 36%.

Among those who know what CUSG is, 51.21% also define its role as supporting, representing, orienting, and organizing unions. 23.17% state that CUSG's role is to defend workers' rights, 17.08% state its role is to help with credit and training, and 8.54% do not know what CUSG does.

26.31% believe that CUSG is largely made up of peasants or farmers; 23.69% believe all kinds of people belong: farmers, workers, professionals, etc. 22.37% believe only professionals belong to CUSG. We can see here that while some are aware of CUSG's constituency, others believe that CUSG is made up of managers based in the capital city and not the union farmer or worker members. It would be helpful to make the relationship between the union and CUSG clear.

The majority of members surveyed (84.38%) rank CUSG's work as good, while a small percentage (13.54%) ranks it as fair, and only 2.08% consider it very good.

TABLE 66: KNOW WHAT CUSG IS

	So. Coast*	West*	East*	Total
Yes	21.91	20.55	17.12	59.59
No	10.27	4.79	13.70	28.77
No answer	2.05	6.85	2.74	11.64

* Percentages of total sampling. 129 valid responses

TABLE 67: CUSG ROLE

	So. Coast*	West*	East*	Total
1. Support, represent, orient, organize unions	18.29	14.63	18.29	51.21
2. Assistance	8.54	4.88	3.56	17.08
3. Protect rights	7.32	9.76	6.09	23.17
4. Do not know	4.88	3.66	-----	8.54

* Percentages of total sampling. 82 valid responses.

TABLE 68: WHO BELONGS TO CUSG

	So. Coast*	West*	East*	Total
1. Professionals	14.47	2.63	5.27	22.37
2. Peasants, farmers	9.21	9.21	7.89	26.31
3. Worker	1.32	2.63	1.32	5.27
4. Other	5.27	9.21	9.21	23.69
5. Professionals and peasants/farmers	2.63	2.63	1.32	6.58
6. Peasants/farmers and workers	5.27	6.58	1.32	13.17
7. Professionals and workers	2.63	-----	-----	2.63

* Percentages of total sampling. 76 valid responses.

TABLE 69: RATING OF CUSG WORK

	South Coast*	West*	East*	Total
Very good	2.08	--	--	2.08
Good	29.17	23.96	31.25	84.38
Fair	7.28	3.13	3.13	13.54

* Percentages of total sampling. 96 valid responses.

2.6 Union problems

It is quite remarkable that 41.41% of those surveyed state that the union's problems are internal, based on differences between the leadership, the members and CUSG promoters. 19.19% state that problems are of an economic nature, while 15.15% believe they are political.

It is interesting to point out that 68.75% of those surveyed are of the opinion that unions should seek support from CUSG when they have problems, while the second largest group, 16.08%, believe they should turn to the union leadership, the promoters, or the secretary general. Union members have a great deal of confidence in CUSG's ability to solve their economic problems through training, credit, marketing assistance, and so on. 48.34% of the members surveyed responded to the issue of workers' labor problems by stating that assistance should be sought in the union, while 29.16% believe that CUSG would offer the greatest support. This again confirms their degree of confidence in CUSG.

TABLE 70: UNION PROBLEMS

	South Coast*	West*	East*	Total
1. Political				
2. Economic				
3. Labor				
4. Social				
5. Agricultural				
6. Internal				
7. No problems				
	South Coast*	West*	East*	Total
1.	7.07	2.02	6.06	15.15
2.	9.09	7.02	3.03	19.19
3.	2.02	----	----	5.05
4.	7.07	2.02	2.02	11.11
5.	1.01	----	----	1.01
6.	13.13	11.11	17.17	41.41
7.	1.01	2.02	4.04	7.07

* Percentages of total sampling. 99 valid responses.

TABLE 71: WHERE UNIONS SHOULD SEEK HELP FOR PROBLEMS

	South Coast*	West*	East*	Total
1. CUSG				
2. Promoters/leadership/union secretary				
3. Union				
4. 1 and 2				
5. 1 and 3				
6. There is no help				
7. Mr. Alfaro				
8. Regional Federation				
9. Among themselves				
1.	28.57	16.07	24.11	68.75
2.	5.35	2.68	8.04	16.08
3.	2.69	1.79	3.57	8.04
4.	0.89	--	--	0.89
5.	0.89	--	--	0.89
6.	0.89	--	--	0.89
7.	0.89	0.89	0.89	2.67
8.	--	0.89	--	0.89
9.	--	0.89	--	0.89

* Percentages of total sampling. 112 valid responses.

TABLE 72: WHERE A WORKER SHOULD SEEK HELP FOR LABOR PROBLEMS.

	South Coast*	West*	East*	Total
1. Union				
2. Promoters				
3. Secretary or union leadership				
4. CUSG				
5. Court, Ministry of Labor				
6. Federation, others				
1.	21.67	12.50	14.17	48.34
2.	0.83	1.67	---	2.50
3.	1.67	3.33	6.66	11.66
4.	10.93	5.83	12.50	29.16
5.	0.03	1.67	1.67	4.17
6.	0.83	1.67	1.67	4.17

* Percentages of total sampling. 120 valid responses.

Generally speaking, the majority of members surveyed have a great deal of confidence in the union, 91.73% believe that all workers should join a union, and 98.41% state they have confidence in the union support of workers.

TABLE 73: WORKERS SHOULD JOIN THE UNION

	South Coast*	West*	East*	TOTAL
Yes	30.58	24.79	36.36	91.73
No	4.96	3.31	---	8.27

* Percentages of total sampling. 121 valid responses.

TABLE 74: HAS CONFIDENCE IN THE UNION'S SUPPORT OF WORKERS

	South Coast*	West*	East*	TOTAL
Yes	34.92	26.98	36.51	98.41
No	1.59	---	---	1.59

* Percentages of total sampling. 126 valid responses.

2.7 Relation between the unions and CUSG

93.39% of those surveyed believes it is important for their union to maintain a close relationship with CUSG, especially in terms of communication and institutional support, which was mentioned by 27.27%. 24.55% believe the need for this relationship lies in the orientation the members can receive from CUSG. 16.36% believes it is to help maintain a minimum level of organization, and 13.64% believes it is because they belong to CUSG and depend on it.

The idea of a filial relationship with the federation prevails among members, which can, however, sometimes imply a certain degree of paternalism, since everything is expected of CUSG. 96.49% of those surveyed claimed to want to know more about CUSG, while only 3.51% claimed no interest in knowing about CUSG.

2.8 CUSG services

46.07% of those surveyed considers that CUSG provides services in the way of inputs, credit, and training (agricultural and union); 11.24% think of CUSG only as a financial institution. Two groups of 8.99% each believe CUSG's most important service is providing access to inputs and union assistance respectively.

In addition there are other smaller groups of members who believe, for example, that CUSG "offers everything but fails to

come through", or who do not know what services are provided, or who simply state that no services are provided. All of these negative opinions represent 14.61% of those surveyed who have some idea regarding CUSG's existence and functions. Valid responses on this subject represent only 60.96% of the total sampling, due to all the misunderstanding on this subject.

Of the 81 people (55.48%) who expressed their opinion of CUSG services, 67.90% affirm that CUSG services are insufficient. We can see the need here to inform the membership about what it is CUSG is doing and has done.

3. Organizational and political attitudes of members

3.1 Members' abilities to solve their problems

The majority of those surveyed in the three regions (70.63% of the total sampling) believe their union can solve members' problems. Of these, 32.52% believe they are well organized and sufficiently united to do so. 16.58% trust the union leadership to solve their problems. 14.60% expressed the opinion that the union's ability to solve problems depends on orientation and support from CUSG; 8.99% states that there is enough cooperation on the members' part to function as a group. There are also other less representative responses regarding their abilities such as having active and honest members (7.86%) and having ample knowledge (7.86%).

Those members who were critical about the union's ability to solve their problems (37.84%) base their mistrust principally on the lack of organization and unity within the union. Lack of assistance and union training, and a lack of experience were also mentioned as weak points in the local unions (24.32% and 13.51% respectively). 10.87% hold the opinion that the union functions poorly.

In reality, there are few negative opinions about the possibility of effective union action. It is interesting to note that the least attended region in terms of training and assistance is the eastern region, where 28.57% of responses were negative, while the best attended region, the southern coast, had the most negative responses (30% of the total sampling).

3.2 Political involvement of unions

In the eastern region 32.11% consider political involvement important for unions; this is followed by 28.44% in the southern coast and 20.18% in the western highlands. This seems contradict

previous ideas in the sense that generally the southern coast and the western highlands show a greater degree of politicalization and union awareness. However, it is possible that these responses represent the fear that union members have of getting involved in some activity that could compromise their family or their own safety.

Those who responded affirmatively (80.73%) expressed in various ways that the union's role in national politics should be to find a place for peasants and workers in the political arena, to apply pressure to the government to bring about improvements in the standard of living of these groups, to elect a government that represents their interests and defends their rights, to make changes and solve workers' problems, and to offer support to poor people and greater freedom for them.

For 23.60% of those surveyed, political action for unions should consist in gaining power and/or representatives in the government. 20.83% believe political action should create a workers' political party, 19.44% believe that workers should organize and unite to bring pressure to bear on the government, and 8.33% believe that workers should seek the right to elect and be elected. These responses represent 49.32% of the total sampling.

TABLE 75: IS IT IMPORTANT THAT UNIONS PARTICIPATE IN THE POLITICAL LIFE OF THE COUNTRY

	So. Coast*	West*	East*	TOTAL
Yes	28.44	20.18	32.11	80.73
No	7.34	6.42	5.50	19.26

* Percentages of regional sampling. 109 valid responses.

3.3 Attitudes toward democracy and democratic practices

Union members named the following as some of the most important features of a democratic country:

- Equal rights, including economic, political, social and labor rights.
- Social justice.
- Sufficient sources of work (specifically land).
- Minimum standard of freedom (speech, association, etc.)
- Honesty, development, and peace; these three features were mentioned insistently.

In the last section of the survey, members were asked to rate certain democratic practices by level of importance.

- Free and honest elections and universal suffrage were considered very important by 96.13% of those surveyed; 2.32% considers it of fair importance, 1.54% considers it unimportant, and 17 people did not respond.
- Legal protection of civil rights: 95.31% of those surveyed considers this very important; 3.90% considers it of fair importance, and 0.78% considers it unimportant, while 19 people did not respond.
- Equal legal protection for all. In the previously established rate of importance: 88.37%, 9.30%, 2.32%, with 17 people not responding.
- Armed forces controlled by civilian government: 85.60%, 7.20%, 7.20%, with 20 people not responding.
- Government promotion of economic opportunities: 89.77%, 5.51%, 4.72%. 19 people not responding.
- Government protection and defense of human life: 88%, 8.80%, 3.20% and 21 persons did not respond.
- Government involvement in health and education for all: 96.85% considers this very important, 3.15% considers it of fair importance, and no one considers it unimportant. 19 people did not respond.
- Freedom of association with whomever one chooses: 91.27%, 7.14%, 1.59%, 20 people not responding.
- Freedom of expression or speech: 92.74%, 4.03%, 3.23%, with 22 people not responding.
- Freedom of mobility within and outside the country: 85.93%, 13.38%, 0.79%, with 19 people not responding.
- Political representation of all important groups: 84.67%, 11.29%, 4.03%. 22 people did not respond.
- Defense of human rights: 95.20%, 3.20%, 1.60%, 21 people did not respond.
- Protection and promotion of indigenous cultures: 95.20%, 4%, and 0.80%. 21 people did not respond.

ANNEX

ESTUDIO DE BASE

CUSG-AIFLD
1988

Número 1 _____

- 1. Ubicación
 - 1. Costa Sur _____
 - 2. Occidente _____
 - 3. Oriente _____
 - 4. _____
- 2. Sindicato _____
 - 01-10 sindicatos en la Costa Sur
 - 11-20 sindicatos en el Occidente
 - 21-30 sindicatos en el Oriente
- 3. Nombre del entrevistado _____
- 4. Departamento _____
 - Municipio _____
 - Comunidad _____
- 5. Encuestador _____
- 6. Fecha de encuesta (día/mes/año) ___/___/___
- 7. Tiempo de entrevista de: ___:___ a ___:___

QUE LENGUAS HABLA:

- 1. Es monolingüe maya-hablante _____
- 2. Habla español con dificultad _____
- 3. Habla español relativamente bien _____
- 4. Habla con fluidez en dos idiomas _____
- 5. Monolingüe español _____
- 6. Habla lengua maya con dificultad _____
- 8. Cuando empezó a vivir aquí? _____
- 9. En qué trabajaba antes de venir aquí?
 - a. primera respuesta _____
 - b. segunda respuesta _____
 - c. tercera respuesta _____

SONDEE PARA TODOS LOS TRABAJOS.

- 10. Donde vivió antes de venir aquí: _____
 - 1. aquí
 - 2. mismo municipio
 - 3. mismo departamento
 - 4. fuera del departamento

82!

10a. SI FUERA DEL DEPARTAMENTO, estaba en la costa, en el altiplano, en el oriente, el norte o la Capital? -----

- 1. costa sur
- 2. altiplano
- 3. oriente
- 4. norte
- 5. capital
- 6. otro -----
- 9. no responde

11. Y ahora --- Cuántas personas viven en su casa aquí, incluyendo usted?

- 01 vive solo(a)
- 02-98 número
- 99 no responde

PARA LLENAR EL CUADRO, USE LAS SIGUIENTES PREGUNTAS PARA CADA PERSONA EN LA CASA

12. Quiénes son estas personas? Empecemos con el mayor.

- a. Cuántas personas viven aquí con usted? (debe coincidir con la respuesta 11)
- b. Es esposa, hijo, sobrino, etc?
- c. Es varón o mujer?
- d. Cuántos años ha cumplido?
- e. Vive aquí siempre o solo un tiempo?
SI SOLO UN TIEMPO, Es porque trabaja fuera o por otra razón?

CUADRO 12

Número (a)	Relación (b)	Sexo (c)	Edad (d)	Permanencia (e)
1	-----	----	---	----
2	-----	----	---	----
3	-----	----	---	----
4	-----	----	---	----
5	-----	----	---	----
6	-----	----	---	----
7	-----	----	---	----
8	-----	----	---	----
9	-----	----	---	----
10	-----	----	---	----
11	-----	----	---	----
12	-----	----	---	----

CODIGOS:

- | | | | |
|---------------------------|----------|----------------|--|
| b. Relación | c. Sexo | d. Edad | e. Permanencia |
| 1. jefe masculino | 1. varón | 01-98 años | 1. siempre |
| 2. esposa o jefe femenino | 2. mujer | 99 no responde | 2. casi siempre, a veces trabaja fuera |
| 3. hijos | | | 3. solo un tiempo, trabaja afuera |
| 4. hermanos | | | 4. solo un tiempo, |
| 5. sobrinos | | | 5. otra razón |
| 6. nietos | | | 9. no responde |
| 7. padres de jefes | | | |
| 8. otros ----- | | | |
| 9. no responde | | | |

13. Ahora tengo unas preguntas sobre las personas que viven en la casa. Empezamos con usted.

13a. Qué grado de escuela ganó? -----
0. nunca asistió
1. primero; programa de alfabetización
2 - 6. segundo a sexto
7. más que la primaria
8. programa de castellanización
9. no sabe/no responde
no aplica

13b. Sabe leer un anuncio o carta? -----
0. no
1. si
8. no responde
9. no aplica

13c. Sabe escribir una carta? -----
0. no
1. si
8. no responde
9. no aplica

13d. Cuál es su religión? -----
1. católica
2. evangélica
3. ninguna religión
4. otra
8. no sabe
9. no responde

SI TIENE ESPOSA PONGA 1 Y PASE A LA PREGUNTA 14a. SI NO TIENE ESPOSO O ESPOSA QUE VIVE EN LA CASA, PREGUNTE LA NUMERO 14 Y PASE A LA NUMERO 15.

14. Usted es viudo (o viuda), nunca se casó, o su esposa (o esposo) vive en otra parte? -----
1. tiene esposa/o; y vive aquí
2. tiene esposa/o; pero no vive aquí
3. no tiene esposa/o; nunca se casó
4. no tiene esposa/o; es viudo
9. no responde

14a. Qué lenguas habla su esposa? -----
1. Es monolingüe maya-hablante
2. Habla español con dificultad
3. Habla español relativamente bien
4. Habla con fluidez los dos idiomas
5. Monolingüe español
6. Habla lengua maya con dificultad
9. No responde/no aplica

14b. Sabe leer un anuncio o carta? -----
0. no
1. si
9. no responde/no aplica

- 14c. Sabe escribir una carta? -----
0. no
1. si
9. no responde/no aplica
- 14d. Qué grado de escuela ganó? -----
0. nunca asistió
1. primero; programa de alfabetización
2. 6-segundo a sexto
7. más que la primaria
8. programa de castellanización
9. no sabe/no responde/no aplica
- 14e. Cuál es su religión? -----
1. católica
2. evangélica
3. ninguna religión
4. otra -----
8. no sabe
9. no responde
- 14f. Se casaron uds. por lo religioso, lo civil, o son unidos? -----
1. civil y religioso
2. solo civil
3. unidos
8. no hay esposa/o
9. no responde

15. PARA CADA HIJO MAYOR DE LOS 6 AÑOS VIVIENDO EN LA CASA, USE LAS SIGUIENTES PREGUNTAS PARA LLENAR EL CUADRO

Ahora, pasando a sus hijos, empezando con el mayor: ___ (nombre) ___:

PARA LOS QUE TIENEN MAS QUE 15 AÑOS:

- 15a. Qué lenguas habla
- 15b. Qué grado de escuela ganó?
- 15c. Sabe leer un anuncio o carta?
- 15d. Sabe escribir una carta?

PARA LOS QUE TIENEN DE 6 A 15 AÑOS:

- 15e. Qué lenguas habla?
- 15f. Esta inscrito en la escuela?
- 15g. SI SI, en que grado está inscrito?
- 15h. Cuántos años tiene de asistir a la escuela?
- 15i. SI NO, qué grado ganó?
- 15j. Sabe leer un anuncio?
- 15k. Sabe escribir una carta?

CUADRO 15

Número	idioma? (a,e)	lee? (c,j)	escribe? (d,k)	grado? (b,g,i)	inscrito? (f)	si-años? (h)
Mayores de 15						
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
De 6 a 15						
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----

CODIGOS:

a. lenguas

- 1. Es monolingüe maya-hablante
- 2. Habla español con dificultad
- 3. Habla español relativamente bien
- 4. Habla con fluidez los dos idiomas
- 5. Monolingüe español
- 6. Habla lengua maya con dificultad
- 9. no responde/no aplica

b.g.h. grado

- 0. nunca asistió
- 1. primero; programa de alfabetización
- 2. 6-segundo a sexto
- 7. más de primaria
- 8. programa de castellanización
- 9. no responde/no aplica

c.d.g.i.k.

- 0. no
- 1. si
- 9. no responde/no aplica

g. años:

- 1-12-número de años
- 99 no sabe/no responde/no aplica

Pasando a sus padres....

17. Donde vive su padre? -----
17a. Donde vive su madre? -----

- 1. aquí
- 2. mismo municipio
- 3. mismo departamento
- 4. fuera del departamento
- 5. ya se murió
- 6. no sabe
- 9. no responde

18. Su padre tiene tierra propia -o- tenía tierra propia al morir?
 0. no
 1. si -----
 2. no sabe
 9. no responde

18a. SI NO, alguna vez en su vida tuvo tierras propias?
 0. no -----
 1. si
 2. no sabe
 3. no responde

18b. SI SI, cuántas manzanas o cuerdas tiene -o- tenía?
 01-97 número
 98 no sabe
 99 no responde

- UNIDAD:
- 1. manzanas
 - 2. cuerdas 12
 - 3. cuerdas 16
 - 4. cuerdas 25
 - 5. cuerdas 32
 - 6. cuerdas 40
 - 7. tareas
 - 8. otro -----
 - 9. no aplica/no responde

18c. SI SI Y SU PADRE ESTA MUERTO, que pasó con la tierra al morir su padre?
 1. pasó a su madre -----
 2. pasó al hijo mayor
 3. pasó a la hija mayor
 4. se dividió entre los hijos
 5. otro -----
 8. no sabe
 9. no responde

19. Cuántos hermanos y hermanas tiene? -----
 00 ninguno
 01 98 número
 99 no responde

19a. Alguno de sus hermanos tiene tierras propias? -----
 0. no
 1. si
 8. no sabe
 9. no responde/no aplica

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19b. SI SI, cuántas manzanas o cuerdas tiene(n)?

- 00. no tiene hermano/a 1 -----
 - 01-97 número hermano/a 2 -----
 - 98 no sabe hermano/a 3 -----
 - 99 no responde/sólo un hermano/a 4 -----
- hermano tiene tierra

- UNIDAD:
- 1. manzanas
 - 2. cuerdas 12
 - 3. cuerdas 16
 - 4. cuerdas 25
 - 5. cuerdas 32
 - 6. cuerdas 40
 - 7. tareas -----
 - 8. otro
 - 9. no aplica/
no responde

20. Ud. tiene tierra propia en otra parte? -----

- 0. no
- 1. si
- 9. no responde

SI NO TIENE TIERRA PROPIA EN OTRA PARTE, PASE A LA PREGUNTA 22.

21. SI TIENE TIERRA PROPIA EN OTRA PARTE, USE LAS SIGUIENTES PREGUNTAS PARA LLENAR EL CUADRO 21:

La(s) parcela(s) propia(s) en otra parte:

- 21a. Es comprada o heredada?
 - 1. comprada
 - 2. heredada
 - 9. no aplica/no responde
- 21b. En qué año lo compró/heredó?
 - 01-88 el año
 - 99 no aplica/no responde
- 21c. Heredó una parcela o finca entera o se fraccionó?
 - 1. entera
 - 2. fracción
 - 8. no sabe
 - 9. no aplica/no responde
- 21d. Compró de un pariente, de un propietario grande o de un propietario pequeño
 - 1. de un pariente
 - 2. de propietario grande
 - 3. de propietario pequeño
 - 4. otro -----
 - 8. no sabe
 - 9. no aplica/no responde
- 21e. A qué precio lo compró?
 - 00001-99998-quetzales
 - 99999-no aplica/
no responde
- 21f. Tiene título registrado,
 - 1. título registrado
 - 2. escritura
 - 3. otro
 - 8. no sabe
 - 9. no aplica/no responde
- 21g. Cuántas manzanas o cuerdas tiene?
 - 00-98 número
 - 99 no aplica/no responde

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UNIDAD:

- 1. manzanas
- 2. cuerdas 12
- 3. cuerdas 16
- 4. cuerdas 25
- 5. cuerdas 32
- 6. cuerdas 40
- 7. tareas
- 8. otro
- 9. no aplica/no responde

CUADRO 21

	Comprada	año	entera	quien	precio	tamaño	unidad
	(a)	(b)	(c)	(d)	(e)	título (f)	(g)
Parcela 1	-----	-----	-----	-----	-----	-----	-----
Parcela 2	-----	-----	-----	-----	-----	-----	-----

22. Ud. tiene tierra propia que no trabaja en otra parte?
- 0. no
 - 1. si
 - 9. no responde

- 22a. SI SI, la parcela suya que ud. no trabaja, la tiene abandonada, prestada, arrendada, u otro?
- 1. abandonada
 - 2. arrendada
 - 3. prestada
 - 4. medianía
 - 5. en pasto
 - 6. en bosque
 - 7. otro
 - 9. no aplica/no responde

22b. Por qué? -----

- 22c. SI LA TIENE ARRENDADA:
- Cuántos quetzales recibe en renta al año?
- 0001-9995 quetzales
 - 9996-paga en derecho de uso
 - 9997-paga en trabajo
 - 9998-paga en especie
 - 9999-aplica/no responde

23. Durante el año pasado (desde mayo 1987) ud. ha trabajado alguna parcela arrendada en otra parte?
- 0. no
 - 1. si
 - 9. no responde

SI NO HA TENIDO TIERRA ARRENDADA, PASE A LA PREGUNTA 24.

- 23a. La parcela arrendada que trabajó el año pasado (o que trabaja ahora), la arrienda de un propietario grande, medio, pequeño, del estado, de un pariente, o de quién?
- 1. pariente
 - 2. propietario grande
 - 3. propietario pequeño
 - 4. del estado
 - 5. otro -----
 - 9. no aplica/no responde

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23b. Cuántos quetzales pagó en renta al año?

Q. _____

- 0001-9995-quetzales
- 9996-paga en trabajo
- 9997-paga en especie
- 9998-paga en derecho de uso
- 9999-no aplica/no responde

Vamos a hablar ahora un poco de sus tierras y siembras.

24. Cuántas siembras hizo el año pasado aquí y en parcelas arrendadas durante el año pasado y este año?

- 0. ninguna/no tuvo tierra
- 01-09. número de siembras
- 9. no responde

SI NO TUVO SIEMBRAS EL AÑO PASADO NI ESTE, PASE A LA PREGUNTA 31.

24a. El año pasado o este año ha tenido algún cultivo permanente u otro cultivo que se coseche al año o a los dos años, como piña o papaya?

- 0. no
- 1. si
- 9. no aplica/no responde

25. En general, cuantos días trabaja por semana en su parcela?

- 1-7-número de días
- 9-no responde

26. Qué cultivo o cultivos trabajó en 1987 en la siembra de primera? Me gustaría hablar de todas las parcelas y tierras que trabajó. USE LAS SIGUIENTES PREGUNTAS PARA LLENAR LOS CUADROS 26, 27 Y 28. INCLUYE CULTIVOS PERMANENTES Y SEMI-PERMANENTES

Empezamos con su parcela aquí.

- Cuántas manzanas o cuerdas tiene la parcela en total?
(SI RESPONDE EN CUERDAS, PREGUNTE CUERDAS DE A COMO)
- Esta parcela es tierra propia, arrendada, comunal, o qué?
- Qué cultivo o cultivos sembró en esta parcela?
- Cuántas manzanas o cuerdas sembró de cada cultivo?
- Cuántas manzanas o cuerdas dejó sin cultivar?

Trabajó otra parcela en otra parte?

- Cuántas manzanas o cuerdas tiene la parcela en total?
- Esta parcela es tierra propia, arrendada, comunal, o qué?
- Qué cultivo o cultivos sembró en esta parcela?
- Cuántas manzanas o cuerdas sembró de cada cultivo?
- Cuántas manzanas o cuerdas dejó sin cultivar?

CUADRO 26	SIEMBRAS DE PRIMERA DEL AÑO PASADO.		
	parcela aquí	otra parcela	otra parcela
area total	-----	-----	-----
unidad	-----	-----	-----
tenencia	-----	-----	-----
cultivo perman.	-----	-----	-----
area	-----	-----	-----
cultivo 2	-----	-----	-----
area	-----	-----	-----
cultivo 3	-----	-----	-----
area	-----	-----	-----
area sin cultivar	-----	-----	-----

CODIGOS:

Unidad	Tenencia:	Cultivo:
1-manzanas	0-propia heredada	pregunta abierta
2-cuerdas 12	1-propia comprada	
3-cuerdas 16	2-arrendada	
4-cuerdas 25	3-comunal	
5-cuerdas 32	4-mediania	
6-cuerdas 40	5-prestada	
7-tareas	6-propiedad familiar	
8-otro	7-derecho de uso	
9-no responde/ no aplica	8-otro	
	9-no responde/no aplica	

at

27. HUBO SIEMBRA DE SEGUNDA (agosto a octubre) en 1987? SI _____ NO _____
USE LAS MISMAS PREGUNTAS Y CODIGOS QUE USO PARA LLENAR EL CUADRO 26. SI NO
HUBO SIEMBRA DE SEGUNDA, PASE AL CUADRO 28.

CUADRO 27	SIEMBRA DE SEGUNDA DEL AÑO PASADO		
	parcela aquí	otra parcela	otra parcela
area total	XXXXXXXXXX	-----	-----
unidad	XXXXXXXXXX	-----	-----
tenencia	XXXXXXXXXX	-----	-----
cultivo perm area	-----	-----	-----
cultivo 2 area	-----	-----	-----
cultivo 3 area	-----	-----	-----
Área sin cultivar	-----	-----	-----

28. HUBO SIEMBRA DE TERCERA (nov a dic) en 1987? SI _____ NO _____
SI NO, PASE A LA PREGUNTA 29.

CUADRO 28	SIEMBRA DE TERCERA DEL AÑO PASADO		
	parcela aquí	otra parcela	otra parcela
area total	XXXXXXXXXX	-----	-----
unidad	XXXXXXXXXX	-----	-----
tenencia	XXXXXXXXXX	-----	-----
cultivo perm area	-----	-----	-----
cultivo 2 area	-----	-----	-----
cultivo 3 area	-----	-----	-----
Área sin cultivar	-----	-----	-----

CODIGOS:

- | | | |
|-----------------------------|-------------------------|------------------|
| Unidad: | Tenencia: | Cultivo: |
| 1-manzanas | 0-propia heredada | pregunta abierta |
| 2-cuerdas 12 | 1-propia comprada | |
| 3-cuerdas 16 | 2-arrendada | |
| 4-cuerdas 25 | 3-comunal | |
| 5-cuerdas 32 | 4-mediana | |
| 6-cuerdas 40 | 5-prestada | |
| 7-tareas | 6-propiedad familiar | |
| 8-otro _____ | 7-derecho de uso | |
| 9-no responde/
no aplica | 8-otro _____ | |
| | 9-no responde/no aplica | |

29. Qué cultivo o cultivos ha trabajado este año en la siembra de primera? Me gustaría hablar de todas las parcelas y tierras que trabajó. USE LAS SIGUIENTES PREGUNTAS PARA LLENAR LOS CUADROS 29, 30 y 31. INCLUYE CULTIVOS PERMANENTES Y SEMI-PERMANENTES

Empezamos con su parcela aquí.

- a. Cuántas manzanas o cuerdas tiene la parcela en total?
(SI RESPONDE EN CUERDAS, PREGUNTE CUERDAS DE A COMO)
- b. Esta parcela es tierra propia, arrendada, comunal, o que?
- c. Qué cultivo o cultivos sembró en esta parcela?
- d. Cuántas manzanas o cuerdas sembró de cada cultivo?
- e. Cuántas manzanas o cuerdas dejó sin cultivar?

Trabajó otra parcela en otra parte?

- f. Cuántas manzanas o cuerdas tiene la parcela en total?
- g. Esta parcela es tierra propia, arrendada, comunal, o que?
- h. Qué cultivo o cultivos sembró en esta parcela?
- i. Cuántas manzanas o cuerdas sembró de cada cultivo?
- j. Cuántas manzanas o cuerdas dejó sin cultivar?

CUADRO 29	SIEMBRA DE PRIMERA DE 1988		
	parcela aquí	otra parcela	otra parcela
area total	-----	-----	-----
unidad	-----	-----	-----
tenencia	-----	-----	-----
cultivo perman.	-----	-----	-----
area	-----	-----	-----
cultivo 2	-----	-----	-----
area	-----	-----	-----
cultivo 3	-----	-----	-----
area	-----	-----	-----
area sin cultivar	-----	-----	-----

CODIGOS:

Unidad	Tenencia:	Cultivo:
1-manzanas	0-propia heredada	pregunta abierta
2-cuerdas 12	1-propia comprada	
3-cuerdas 16	2-arrendada	
4-cuerdas 25	3-comunal	
5-cuerdas 32	4-mediania	
6-cuerdas 40	5-prestada	
7-tareas	6-propiedad familiar	
8-otro _____	7-derecho de uso	
9-no responde/ no aplica	8-otro _____	
	9-no responde/no aplica	

30. HUBO SIEMBRA DE SEGUNDA (agosto a octubre) en 1988? SI _____ NO _____
 USE LAS MISMAS PREGUNTAS Y CODIGOS QUE USO PARA LLENAR EL CUADRO 29. SI NO
 HUBO SIEMBRA DE SEGUNDA, PASE AL CUADRO 31.

CUADRO 30	SIEMBRA DE SEGUNDA DE 1988		
	parcela aquí	otra parcela	otra parcela
area total	-----	-----	-----
unidad	-----	-----	-----
tenencia	-----	-----	-----
cultivo perman	-----	-----	-----
area	-----	-----	-----
cultivo 2	-----	-----	-----
area	-----	-----	-----
cultivo 3	-----	-----	-----
area	-----	-----	-----
area sin cultivar	-----	-----	-----

31. ESTA SEMBRANDO AHORA (nov a dic)? SI _____ NO _____
 SI NO, PASE A LA PREGUNTA 32.

CUADRO 31	SIEMBRA DE TERCERA DE 1988		
	parcela aquí	otra parcela	otra parcela
area total	-----	-----	-----
unidad	-----	-----	-----
tenencia	-----	-----	-----
cultivo perman	-----	-----	-----
area	-----	-----	-----
cultivo 2	-----	-----	-----
area	-----	-----	-----
cultivo 3	-----	-----	-----
area	-----	-----	-----
area sin cultivar	-----	-----	-----

CODIGOS:

Unidad:
 1-manzanas
 2-cuerdas 12
 3-cuerdas 16
 4-cuerdas 25
 5-cuerdas 32
 6-cuerdas 40
 7-tareas
 8-otro _____
 9-no responde/

Tenencia:
 0-propia heredada
 1-propia comprada
 2-arrendada
 3-comunal
 4-mediania
 5-prestada
 6-propiedad familiar
 7-derecho de uso
 8-otro _____

Cultivo:
 pregunta abierta

LAS SIGUIENTES PREGUNTAS SE REFIEREN A SU PARCELA AQUI Y A LAS SIEMBRAS DE 1987. SI NO ESTABA AQUI DURANTE UNA DE LAS SIEMBRAS Y TRABAJO OTRA PARCELA, USE LA OTRA PARCELA.

32. HUBO SIEMBRA DE PRIMERA EN 1987? SI _____ NO _____
 HUBO SIEMBRA DE SEGUNDA EN 1987? SI _____ NO _____
 HUBO SIEMBRA DE TERCERA EN 1987? SI _____ NO _____

USE LAS SIGUIENTES PREGUNTAS PARA LLENAR EL CUADRO 32. SI HABIA MAS DE UN CULTIVO EN LA SIEMBRA, ESCOJA UNO. PRIVILEGIO:

- 1 - CULTIVO PERMANENTE DE EXPORTACION (CAFE)
- 2 - HORTALIZAS
- 3 - OTROS CULTIVOS

32a. En 1987, en la siembra de primera, ud. sembró (cultivo). Lo sembró en su parcela de aquí, en otra parcela propia o en otra parcela no propia (arrendada)?

- CODIGO: 1 - De aquí
 2 - Otra no propia
 3 - Otra propia

32b. Durante todos los meses que duró la siembra de primera, cuántos días trabajó ud. o las personas de su familia en (tarea) ?

32c. Ud. pagó jornales para (tarea) ? Cuántos días pagó?

32d. En 1987, en la siembra de segunda, ud. sembró (cultivo). Lo sembró en su parcela de aquí, en otra parcela propia o en otra parcela no propia (arrendada)?

- CODIGO: 1 - De aquí
 2 - Otra no propia
 3 - Otra propia

32e. Durante todos los meses que duró la siembra de segunda, cuántos días trabajó ud. o las personas de su familia en (tarea) ?

32f. Ud. pagó jornales para (tarea) ? Cuántos días pagó?

32g. En 1987, en la siembra de tercera, ud. sembró (cultivo). Lo sembró en su parcela de aquí, en otra parcela propia o en otra parcela no propia (arrendada)?

- CODIGO: 1 - De aquí
 2 - Otra no propia
 3 - Otra propia

32h. Durante todos los meses que duró la siembra de tercera, cuántos días trabajó ud. o las personas de su familia en (tarea) ?

32i. Ud. pagó jornales para (tarea) ? Cuántos días pagó?

VER CUADRO Y CODIGO PAGINA SIGUIENTE

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SIEMBRAS DE 1987

CUADRO 32

CULTIVO	SIEMBRA DE PRIMERA		SIEMBRA DE SEGUNDA		SIEMBRA DE TERCERA		
	(a)	(b)	(d)	(e)	(g)	(h)	
PARCELA	Tareas para este cultivo	Días trab. fam. (b)	Días jorna-leros (c)	Días trab. fam. (e)	Días jorna-leros (f)	Días trab. fam. (h)	Días jorna-leros (i)
Descombrar, limpiar, chapear	-----	-----	-----	-----	-----	-----	-----
Desombrar	-----	-----	-----	-----	-----	-----	-----
Preparación de tierra	-----	-----	-----	-----	-----	-----	-----
Arar	-----	-----	-----	-----	-----	-----	-----
Ahojar	-----	-----	-----	-----	-----	-----	-----
Preparación de semilla o plantas	-----	-----	-----	-----	-----	-----	-----
Sembrar	-----	-----	-----	-----	-----	-----	-----
Mantener	-----	-----	-----	-----	-----	-----	-----
Fertilizar	-----	-----	-----	-----	-----	-----	-----
Aplicar insecticida	-----	-----	-----	-----	-----	-----	-----
Aplicar herbicida	-----	-----	-----	-----	-----	-----	-----
Cosechar	-----	-----	-----	-----	-----	-----	-----
Beneficio de cosecha	-----	-----	-----	-----	-----	-----	-----
Almacenaje de cosecha	-----	-----	-----	-----	-----	-----	-----
Mercadeo	-----	-----	-----	-----	-----	-----	-----
Otras tareas	-----	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----

CODIGO: 000 - No trabajó en esta tarea
 001-365 Número de días
 999 - No responde/no aplica

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LAS SIGUIENTES PREGUNTAS SE REFIEREN A SU PARCELA AQUI Y A LAS SIEMBRAS DE 1988. SI NO ESTABA AQUI DURANTE UNA DE LAS SIEMBRAS Y TRABAJO OTRA PARCELA, USE LA OTRA PARCELA.

33. HUBO SIEMBRA DE PRIMERA EN 1988? SI _____ NO _____
 HUBO SIEMBRA DE SEGUNDA EN 1988? SI _____ NO _____
 HUBO SIEMBRA DE TERCERA EN 1988? SI _____ NO _____

USE LAS SIGUIENTES PREGUNTAS PARA LLENAR EL CUADRO 38. SI HABIA MAS DE UN CULTIVO EN LA SIEMBRA, ESCOJA UNO. PRIVILEGIE:

- 1 - CULTIVO PERMANENTE DE EXPORTACION (CAFE)
- 2 - HORTALIZAS
- 3 - OTROS CULTIVOS

- 33a. En 1988, en la siembra de primera, ud. sembró (cultivo). Lo sembró en su parcela de aquí, en otra parcela propia o en otra parcela no propia (arrendada)?
 CODIGO: 1 - De aquí
 2 - Otra no propia
 3 - Otra propia
- 33b. Durante todos los meses que duró la siembra de primera, cuantos días trabajó ud. o las personas de su familia en (tarea) ?
- 33c. Ud. pagó jornales para (tarea) ? Cuántos días pagó?
- 33d. En 1988, en la siembra de segunda, ud. sembró (cultivo). Lo sembró en su parcela de aquí, en otra parcela propia o en otra parcela no propia (arrendada)?
 CODIGO: 1 - De aquí
 2 - Otra no propia
 3 - Otra propia
- 33e. Durante todos los meses que duró la siembra de segunda, cuantos días trabajó ud. o las personas de su familia en (tarea) ?
- 33f. Ud. pagó jornales para (tarea) ? Cuántos días pagó?
- 33g. En 1988, en la siembra de tercera, ud. sembró (cultivo). Lo sembró en su parcela de aquí, en otra parcela propia o en otra parcela no propia (arrendada)?
 CODIGO: 1 - De aquí
 2 - Otra no propia
 3 - Otra propia
- 33h. Durante todos los meses que duró la siembra de tercera, cuantos días trabajó ud. o las personas de su familia en (tarea) ?
- 33i. Ud. pagó jornales para (tarea) ? Cuántos días pagó?

VER CUADRO Y CODIGOS EN LA PAGINA SIGUIENTE:

SIEMBRAS DE 1988

CUADRO 33

CULTIVO	SIEMBRA DE PRIMERA		SIEMBRA DE SEGUNDA		SIEMBRA DE TERCERA				
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
DESCOMBRAR, LIMPIAR, CHAPEAR	-----	-----	-----	-----	-----	-----	-----	-----	-----
DESCOMBRAR	-----	-----	-----	-----	-----	-----	-----	-----	-----
PREPARACIÓN DE TIERRA	-----	-----	-----	-----	-----	-----	-----	-----	-----
ARAR	-----	-----	-----	-----	-----	-----	-----	-----	-----
AHOYAR	-----	-----	-----	-----	-----	-----	-----	-----	-----
PREPARACIÓN DE SEMILLA O PLANTAS	-----	-----	-----	-----	-----	-----	-----	-----	-----
SEMBRAR	-----	-----	-----	-----	-----	-----	-----	-----	-----
MANTENER	-----	-----	-----	-----	-----	-----	-----	-----	-----
FERTILIZAR	-----	-----	-----	-----	-----	-----	-----	-----	-----
APLICAR INSECTICIDA	-----	-----	-----	-----	-----	-----	-----	-----	-----
APLICAR HERBICIDA	-----	-----	-----	-----	-----	-----	-----	-----	-----
COSECHAR	-----	-----	-----	-----	-----	-----	-----	-----	-----
BENEFICIO DE COSECHA	-----	-----	-----	-----	-----	-----	-----	-----	-----
ALMACENAJE DE COSECHA	-----	-----	-----	-----	-----	-----	-----	-----	-----
MERCADERO	-----	-----	-----	-----	-----	-----	-----	-----	-----
OTRAS TAREAS	-----	-----	-----	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----	-----	-----

CODIGO: 000 - No trabajó en esta tarea
001-355 Número de días
999 - No responde/no aplica

97

34. Ud. ha trabajado en otra parte el año pasado?

- 0-no
- 1-si
- 9-no responde

SI SI TRABAJO EN OTRA ACTIVIDAD DIFERENTE DEL TRABAJO EN SU PARCELA, USE LAS SIGUIENTES PREGUNTAS PARA LLENAR EL CUADRO 34. SONDEE PARA MAS DE UNA ACTIVIDAD (artesanía, jornalero agrícola, sastrería, albañilería, etc.).

- 34a. En qué trabajaba?
- 34b. En qué mes o meses trabajaba en esta actividad?
- 34c. Cuántos días trabajaba por mes?
- 34d. Donde trabajaba -en la costa, el altiplano, el oriente, la capital, fuera del país, etc?
- 34e. Cómo le pagaron -en dinero, en especie, o en derecho de uso?
- 34f. Cuánto ganó?
 - en dinero: Cuántos quetzales?
 - en especie: Cuánto es eso para ud. en dinero?
 - en derecho de uso: Cuánta tierra?
- 34g. Cada cuánto le pagaron?
- 34h. Cuanto ganó de esta actividad durante el año pasado?

CUADRO 34 actividad (a)	meses (b)	dias (c)	donde (d)	cómo pago (e)	cuánto pagó (f)	cada cuánto (g)	ganancias anuales (h)
-----	a	---	----	----	-----	---	-----
-----	a	---	----	----	-----	---	-----
-----	a	---	----	----	-----	---	-----
-----	a	---	----	----	-----	---	-----
-----	a	---	----	----	-----	---	-----

CODIGOS:

- | | | | |
|----------------------|------------------------------|-----------------|--------------------------|
| a. actividad: | b. mes: | c. días: | d. donde: |
| pregunta abierta | 01-enero | 01-31 días | 01-mismo municipio |
| | 02-febrero | x mes | 02-altiplano |
| | 03-marzo | 99-no aplica | 03-oriente |
| | 04-abril | /no responde | 04-norte |
| | 05-mayo | | 05-noroeste |
| | 06-junio | | 06-la costa |
| | 07-julio | | 07-la capital |
| | 08-agosto | | 08-el Petén |
| | 09-septiembre | | 09-fuera del país |
| | 10-octubre | | 10-otro |
| | 11-noviembre | | 99-no aplica/no responde |
| | 12-diciembre | | |
| | 99-no responde/
no aplica | | |

- | | | |
|-------------------------|------------------------------|-------------------------|
| e. pago: | f. cuánto pagaron y | g. Cada cuanto? |
| 1-dinero | h. ganancias anuales: | 1-diario |
| 2-especie | 0001-9998-quetzales | 2-semanal |
| 3-derecho de uso | 9999-no aplica/no responde | 3-quincenal |
| 9-no aplica/no responde | | 4-mensual |
| | | 5-anual |
| | | 6-otro |
| | | 9-no aplica/no responde |

100

35. Quién es el dueño de la tierra aquí? NO SONDEE
- 1-cada uno es dueño de su propia parcela -----
 - 2-tierra propia pero estoy pagando
 - 3-la CUSG o el sindicato, etc
 - 4-tierras comunales (el grupo es el dueño)
 - 5-Otro -----
 - 8-no sabe
 - 9-no responde

36. Ya tiene ud. título de su parcela? -----
- 0-no
 - 1-si
 - 8-no sabe
 - 9-no responde

- 36a. SI NO, porque no? -----
-
- SONDEE
- 1-proceso administrativo normal
 - 2-culpa propia (no ha pagado, etc)
 - 3-culpa de la CUSG, etc.
 - 4-culpa del Gobierno
 - 5-problemas en el traspaso del dueño anterior
 - 6-otra razón
 - 8-no sabe
 - 9-no responde/no aplica
 - tiene título

* (GASTOS DE PRODUCCION)

PARA LLENAR EL CUADRO 37 USE LAS SIGUIENTES PREGUNTAS PARA CADA SIEMBRA DEL AÑO PASADO EN SU PARCELA DE AQUI.

37. Tengo unas preguntas sobre los gastos de producción en su parcela de aquí. Empezando con la siembra de primera de 1987.
- a. Ud. usó semilla mejorada? Cuánto gastó ud. en la compra?
 - b. Ud. usó fertilizante?
 - c. Ud. usó insecticida?
 - d. Ud. usó fungicida?
 - e. Ud. usó herbicida?
 - f. Ud. pagó jornales para el trabajo durante esta siembra? Cuánto gastó por total en el pago de jornales?
 - g. Ud. pagó jornales o arrienda para usar yunta de bueyes, tractor, bomba fumigadora, u otra maquinaria? Cuánto gastó por total en yunta y maquinaria?

VER CUADRO 37 Y CODIGOS EN LA PAGINA SIGUIENTE:

CODIGO:
 000-no usó
 001-998-quetzales
 999-no responde/no aplica

CUADRO 37

	1987 Siembra de primera gastos	de segunda gastos	de tercera gastos
a. semilla mejorada	Q. ___ ___ ___	Q. ___ ___ ___	Q. ___ ___ ___
b. fertilizante	Q. ___ ___ ___	Q. ___ ___ ___	Q. ___ ___ ___
c. insecticida	Q. ___ ___ ___	Q. ___ ___ ___	Q. ___ ___ ___
d. fungicida	Q. ___ ___ ___	Q. ___ ___ ___	Q. ___ ___ ___
e. herbicida	Q. ___ ___ ___	Q. ___ ___ ___	Q. ___ ___ ___
f. jornaleros	Q. ___ ___ ___	Q. ___ ___ ___	Q. ___ ___ ___
g. maquinaria	Q. ___ ___ ___	Q. ___ ___ ___	Q. ___ ___ ___

38. Use las mismas preguntas de la 37 para determinar los gastos de producción de este año en la parcela de aquí.

CODIGO:
 000-no usó
 001-998-quetzales
 999-no responde/no aplica

CUADRO 38

	1988 Siembra de primera gastos	de segunda gastos	de tercera gastos
a. semilla mejorada	Q. ___ ___ ___	Q. ___ ___ ___	Q. ___ ___ ___
b. fertilizante	Q. ___ ___ ___	Q. ___ ___ ___	Q. ___ ___ ___
c. insecticida	Q. ___ ___ ___	Q. ___ ___ ___	Q. ___ ___ ___
d. fungicida	Q. ___ ___ ___	Q. ___ ___ ___	Q. ___ ___ ___
e. herbicida	Q. ___ ___ ___	Q. ___ ___ ___	Q. ___ ___ ___
f. jornaleros	Q. ___ ___ ___	Q. ___ ___ ___	Q. ___ ___ ___
g. maquinaria	Q. ___ ___ ___	Q. ___ ___ ___	Q. ___ ___ ___

39j. La producción que ha obtenido es la que esperaba? -----

- 0-no
- 1-si
- 8-no sabe
- 9-no responde

39k. SI NO, que cree que hizo que no obtuviera la producción esperada?

- 1-Poca lluvia
- 2-Exceso de lluvia
- 3-Cayó granizo
- 4-Ataque de plagas/enfermedades
- 5-Falta de fertilización
- 6-Mala calidad de semilla
- 7-Otro -----
- 8-No sabe
- 9-No responde

40. Me gustaría saber algo de la venta de su(s) cosecha(s) del año pasado y de este año.

USE LAS SIGUIENTES PREGUNTAS PARA LLENAR EL CUADRO. HAY QUE PREGUNTAR SOBRE CADA CULTIVO DE CADA PARCELA DE CADA SIEMBRA DEL AÑO PASADO Y DEL PRESENTE ANCL. DE NUEVO. NO ES NECESARIO PREGUNTAR SOBRE VENTA DE GRANOS BASICOS, SOLAMENTE SOBRE LOS CULTIVOS COMERCIALIZABLES (BASESE EN EL CUADRO ANTERIOR)

- a. Es de la primera cosecha del año pasado, la segunda, o la tercera?
- b. Es la cosecha de la parcela de aqui o de otra parcela en otra parte?
- c. Vendió individualmente, en grupo organizado o en grupo no organizado?
- d. A quién vendió la cosecha?

CUADRO 40

Cultivo 1987	Cosecha	Parcela de aqui o fuera?	Cómo vendió? (c)	A quién? (d)
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----
1988	-----	-----	-----	-----
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----

CODIGOS:

- | | | | |
|-------------------------------------|-----------------|-----------------|------------------------|
| Cultivo | a. cosecha: | b. Parcela | c. Individual o grupo? |
| Pregunta | 1-mayo a agosto | 1-de aqui | 1-individual |
| abierta | 2-agosto a sep | 2-en otra parte | 2-grupo organizado |
| | 3-nov a dic | | 3-grupo no organizado |
| d.A. quien? | | | 8-no vendió |
| 1-cooperativa | | | 9-no responde |
| 2-intermediario aqui | | | |
| 3-intermediario en centro de acopio | | | |
| 4-mercado local | | | |
| 5-mercado capital | | | |
| 6-agro exportadores | | | |
| 7-otro ----- | | | |
| 8-no vendió/autoconsumo | g. Cantidad | | h. Valor total |
| 9-no responde | | | |

43. Me gustaria preguntarle sobre crédito y recurso para los cultivos en el año pasado para los cultivos dentro y fuera del programa [SE REFIERE SOLO A CREDITO DE PRODUCCION]

USE LAS SIGUIENTES PREGUNTAS PARA LLENAR EL CUADRO PREGUNTE PARA CADA CULTIVO EN CADA PARCELA PARA CADA SIEMBRA DEL AÑO PASADO Y DE ESTE AÑO.

a. El dinero que usó para sembrar (cultivo), ¿es dinero propio o le concedieron crédito? SONDEE CON INSUMOS Y FUENTE DE CREDITO, FORMALES E INFORMALES]

SI UTILIZO CREDITOS:

- b. De cuántos quetzales fue el crédito para sembrar?
- c. A qué plazo vino el crédito?
- d.Cuál fue la tasa de interés mensual?
- e.Cuál es el estado actual del crédito?

CUADRO 43

1987

Cultivo	siembra	Aqui o fuera	donde (a)	Monto (b)	Plazo (c)	Interés Mensual (d)	Estado Actual (e)
-----	---	----	----	-----	-----	-----	-----
-----	---	----	----	-----	-----	-----	-----
-----	---	----	----	-----	-----	-----	-----
-----	---	----	----	-----	-----	-----	-----
-----	---	----	----	-----	-----	-----	-----
-----	---	----	----	-----	-----	-----	-----

1988

Cultivo	siembra	Aqui o fuera	donde (a)	Monto (b)	Plazo (c)	Interés Mensual (d)	Estado Actual (e)
-----	---	----	----	-----	-----	-----	-----
-----	---	----	----	-----	-----	-----	-----
-----	---	----	----	-----	-----	-----	-----
-----	---	----	----	-----	-----	-----	-----
-----	---	----	----	-----	-----	-----	-----
-----	---	----	----	-----	-----	-----	-----

CODIGOS:

Cultivo:
pregunta
abierta

Siembra:
1-3

Parcela:
1-de aqui
2-en otra parte

- a. De donde:
- 1-crédito de familiares
 - 2-crédito de particulares
 - 3-crédito de la CUSG u otra org'n no gubern'l
 - 4-crédito de cooperativa
 - 5-crédito de BANDESA
 - 6-por contrato de cosecha.
 - 7-fondos propios/no necesito
 - 8-no había siembra
 - 9-no respone

b. Monto:
001-998-quetzales
999-no aplica/
no responde

c. Plazo:
11-un mes o menos
02-97-# meses
98-no sabe
99-no aplica/no responde

d. Tasa de Interes:
01-97-porcentaje
98-no sabe
99-no aplica/no responde

e. Estado actual:
1-cancelado
2-al día
3-atrasado
9-no aplica/
no responde

SI UTILIZO CREDITO

43f. Cree que el crédito que le dieron era suficiente para completar sus tareas agrícolas?

0-no

1-si

8-no sabe

9-no responde

43g. SI NO, por qué no? _____

43h. Si no tiene crédito actualmente, necesitaría tenerlo?

0-no

1-si

8-no sabe

9-no responde

43i. SI NO, por qué no? _____

43j. SI SI, para qué cultivos lo utilizaría?

43k. Si le concedieran un préstamo en insumos agrícolas, cuáles insumos necesitaría?

1-semillas

2-fertilizantes

3-pesticidas

4-otro _____

8-no sabe

9-no responde

1108

44. Durante el último año o este año pidió o recibió préstamo para algo fuera de producción, como casa, vestidura, maquinaria, muebles, gastos médicos, u otra?

SONDEE

0-no

1-si

9-no responde

SI NO, PASE A LA PREGUNTA 45.

SI SI, USE LAS SIGUIENTES PREGUNTAS PARA LLENAR EL CUADRO.

- Para qué necesitaba el dinero? [pregunta abierta]
- Cuantos quetzales pidió?
- De dónde lo pidió? [SONDEE CON LAS FUENTES DE PRESTAMOS]
- Se lo dieron?
- SI NO, por qué no?
- SI SI, A qué plazo vino el crédito?
- Cuál fue la tasa de interés mensual?
- Cuál es el estado actual del crédito?

CUADRO 44

Uso (a)	Monto (b)	de donde (c)	CUADRO 44		SI SI, plazo (f)	tasa de interés (g)	estado actual (h)
			SI NO, si o (d)	Por que no (e)			
1987	Q						
	Q						
	Q						
	Q						
	Q						
1988	Q						
	Q						
	Q						
	Q						
	Q						

CODIGOS:

a. uso:

pregunta abierta

c. De donde:

1-crédito de familiares

2-crédito de particulares

3-crédito de la CUSG

u otra org'n no gubern'l

4-crédito de cooperativa

5-crédito de BANDESA

6-pro-contrato de cosecha

7-fondos propios/no
necesito

8-no había siembra

9-no responde

b. Monto:

001-998-quetzales

999-no aplica/no responde

d. se lo dio?

0-no

1-si

9-

f. Plazo:

01-un mes o menos

02-97-# meses

98-no sabe

99-no aplica/

g. Tasa de Interés:

01-97-porcentaje

98-no sabe

99-no aplica/no

responde

h. Estado Actual:

1-cancelado

2-al día

3-atrasado

4-no aplica/no

responde

Ahora me gustaría preguntarle si ha usado varios métodos de producción:

45. Está haciendo algo - de conservación de suelos - para que no se lave la tierra, como curvas a nivel, terrazas, o bloques de agua?

- 0-no
- 1-si
- 8-no sabe
- 9-no responde

SI NO, PASE A LA PREGUNTA 46

45a. SI SI, de qué tipo? _____

45b. SI SI, quien le enseñó a hacerlas? _____

45c. Cree que le han ayudado a mejorar su producción?

- 0-no
- 1-si
- 8-no sabe
- 9-no responde

46. Emplea riegos?

- 0-no
- 1-si
- 8-no sabe
- 9-no responde

SI NO, PASE A LA PREGUNTA 47

46a. SI SI, de qué tipo? _____

46b. SI SI, en qué cultivos utiliza o ha utilizado el riego?

Cultivo	Area regada
_____	_____
_____	_____
_____	_____

46c. SI SI, recibió algún asesoramiento para la utilización del riego?

- 0-no
- 1-si
- 8-no sabe
- 9-no responde

46d. SI SI, de parte de quién? _____

46e. Qué beneficios cree que ha obtenido con la utilización del riego?

47. Cree que hay posibilidades para realizar riegos en esta área?

- 0-no
- 1-si
- 8-no sabe
- 9-no responde

48. Usa o ha usado alguna clase de pesticidas en sus cultivos?

- 0-no
- 1-si
- 8-no sabe
- 9-no responde

48a. SI NO, porque no? -----

48b. SI SI, cuales? -----

48c. SI SI, usa equipo de seguridad para pesticidas? -----
(mascarilla, guantes, etc.)

0-no

1-si

8-no sabe

9-no responde/no aplica

48d. Ha sufrido Ud. o algun miembro de su familia problemas de intoxicación por pesticidas?

0-no

1-si

8-no sabe

9-no responde/no aplica

48e. SI SI, cómo sucedió? -----

48f. SI SI, que hicieron? -----

48g. Que hace con los envases vacios de un pesticida? -----

1-Los entierra

2-Los quema

3-Los deja tirados

4-Los vende

5-Otro -----

6-No sabe

9-No responde

49. Usa yunta de bueyes o tractor?

0-ninguna

1-si yunta

2-si tractor

3-ambos

9-no responde

50. Utiliza o ha utilizado semilla mejorada en sus cultivos?

0-no

1-si

8-no sabe

9-no responde

50a. SI SI, en qué cultivos y variedades, y cuánto le costo?

Cultivo Variedad Costo

50b. Cree que el uso de semillas mejoradas ha aumentado la producción?

0-no

1-si

8-no sabe

9-no responde

111

51. Ha efectuado alguna vez muestreo de suelos?

- 0-no
- 1-si
- 8-no sabe
- 9-no responde

SI NO, PASE A LA PREGUNTA 52

51a. SI SI, quién lo hizo?

- 1-ICTA
- 2-ICAITI
- 3-Particular
- 4-Otro _____
- 8-no sabe
- 9-no responde

51b. SI SI, siguió Ud. las instrucciones de los resultados de los análisis?

- 0-no
- 1-si
- 8-no sabe
- 9-no responde

51c. SI NO, SIGUIÓ LAS INSTRUCCIONES, porque no? _____

52. Hablando del sindicato, ud conoce a todas las demás familias, la mayoría de las familias, la mitad de las familias, unas pocas familias, o ninguna?

- 1-todas
- 2-mayoría
- 3-mitad
- 4-unas
- 5-ninguna
- 9-no responde

53. Es Ud. miembro de alguna cooperativa?

- 0-no
- 1-si
- 9-no responde

53a. SI SI, qué cooperativa? _____

- 1-venta de insumos _____
- 2-mercadeo
- 3-ahorro y crédito
- 4-otro _____
- 9-no aplica/no responde

53b. Es miembro de alguna otra organizac. o sociedad? _____

- 0-no
- 1-si
- 9-no responde

53c. SI SI, cuál

- 1-padres de familia
- 2-organización campesina
- 3-organización religiosa de desarrollo
- 4-otra _____
- 5-no aplica no hay
- 9-no resp e

54. Ha servido Ud. alguna vez como caporal, principal, pastor, hermano de la palabra, o directivo? -----

0-no, ninguna

1-si, caporal

2-si, principal

3-si, pastor o hermano

4-si, directivo

9-no responde

54a. Ha tenido puesto como dirigente en el sindicato? -----

0-no

1-si

BOLETA DE GASTOS DE LA CASA

Ahora tengo unas cuantas preguntas que tienen que ver con los gastos de la familia:

1. Han gastado dinero al contado para curarse este año? _____
 0-no
 1-si
 9-no responde

SI NO, PASE A PREGUNTA 2.

SI SI, USE LAS SIGUIENTES PREGUNTAS PARA LLENAR EL CUADRO, SONDEE PARA CADA PERSONA Y CADA EVENTO

- a. Cuánto le costó la consulta?
- b. Cuánto le costó la medicina?
- c. Cuánto le costó el transporte para ir a la consulta y comprar medicina y volverse?
- d. Habían otros gastos con la consulta? (por ejemplo, tuvo que quedarse la noche allá?)

	TIPO DE GASTOS			
	CONSULTA	MEDICINAS	TRANSPORTE	OTROS GASTOS
1. Q.	Q.	Q.	Q.	Q.
2. Q.	Q.	Q.	Q.	Q.
3. Q.	Q.	Q.	Q.	Q.
4. Q.	Q.	Q.	Q.	Q.

CODIGO: 000.01-997.99-quetzales y centavos
 998.00-Q.998 o más
 999.99-no responde/no aplica

2. Gastaron uds. algun dinero al contado en compra de ropa durante este año? _____
 0-no
 1-si
 9-no responde
- a. Por ejemplo, cuánto gastaron uds. en comprar pantalones? Q.
 - b. en cortes o vestidos? Q.
 - c. en blusas o camisas? Q.
 - d. Compraron algunos zapatos? Q.
 - e. Qué otra ropa compraron el año pasado? Q.

CODIGO: 000.01-997.99-quetzales y centavos
 998.00-Q.998 o más
 999.99-no responde/no aplica

3. Cuánto dinero ha gastado ud. este año por tener los hijos en la escuela, en útiles escolares, uniformes, cuotas y otros gastos?
 Q.

CODIGO: 000.01-997.99-quetzales y centavos
 998.00-Q.998 o más
 999.99-no responde/no aplica

1/4

4. Cada cuánto va gente de su casa al pueblo? (nombre del pueblo más cerca en que provisionan)

-
- 1. diario
- 2. semanal
- 3. quincenal
- 4. cada 20 días
- 5. mensual
- 6. anual
- 7. otro -----
- 9. no responde

En cada viaje cuanto han gastado todos los que van en:

- a. pasajes Q. _ _ _ . _ _ _
- b. comidas en comedores Q. _ _ _ . _ _ _
- c. otros gastos de viaje (refrescos, etc) Q. _ _ _ . _ _ _

CODIGO:
 00.01-98.99-quetzales y centavos
 99.99-no aplica/no responde

5. Este año, cuántas veces han ido gente de su casa a (nombre de cabecera dept'l o a la ciudad más cerca)

-
- 00-no han ido
- 01-98-número de viajes
- 99-no aplica/no responde

En cada viaje, cuánto han gastado en:

- a. pasajes Q. _ _ _ . _ _ _
- b. comidas Q. _ _ _ . _ _ _
- c. otros gastos de viajes (como hospedaje, refrescos, etc.) Q. _ _ _ . _ _ _

CODIGO:
 00.01-98.99-quetzales y centavos
 99.99-no aplica/no responde

6. Me gustaría preguntarle sobre gastos en artículos de la casa y del trabajo. Le voy a leer una lista de cosas y ud. me dice si alguien en su familia las compró durante este año.

PARA LOS ARTICULOS QUE COMPRARON, SIGA CON ESTAS PREGUNTAS PARA LLENAR EL CUADRO:

- b. A qué precio lo compraron?
- c. Lo pagó al contado o con crédito?

Artículo	Compró? (a)	Precio (b)	Tipo de pago (c)
machete	-----	Q. _ _ _ . _ _ _	-----
limas	-----	Q. _ _ _ . _ _ _	-----
hacha	-----	Q. _ _ _ . _ _ _	-----
pala	-----	Q. _ _ _ . _ _ _	-----
azadón	-----	Q. _ _ _ . _ _ _	-----
sombreros	-----	Q. _ _ _ . _ _ _	-----
muebles	-----	Q. _ _ _ . _ _ _	-----
colchas	-----	Q. _ _ _ . _ _ _	-----
trastes	-----	Q. _ _ _ . _ _ _	-----
aparatos eléc- tricos	-----	Q. _ _ _ . _ _ _	-----
bicicleta	-----	Q. _ _ _ . _ _ _	-----
linternas	-----	Q. _ _ _ . _ _ _	-----
otro artículo para la casa o el trabajo	-----	Q. _ _ _ . _ _ _	-----
-----	-----	Q. _ _ _ . _ _ _	-----
-----	-----	Q. _ _ _ . _ _ _	-----
-----	-----	Q. _ _ _ . _ _ _	-----

CODIGOS:

a. Compró	b. Precio	c. Tipo de pago
0-no	00.01-97.99-	1-al contado
1-si	quetzales y centavos	2-con crédito
9-no responde	98.00-Q.98.00 o más	9-no aplica (no compró)/
	99.99-no aplica (no	no responde
	compró)/no responde	

7. Ha gastado dinero este año en:

- a. fiesta del pueblo? Q. _ _ _ . _ _ _
- c. muerte o entierro? Q. _ _ _ . _ _ _
- d. bautizo? Q. _ _ _ . _ _ _
- e. otra fiesta? Q. _ _ _ . _ _ _

CODIGO

00.00-98.00-quetzales y centavos
99.99-no responde

8. Su familia ha ahorrado dinero durante el último año? -----

- 0-no
- 1-si
- 9-no responde

a. SI SI, cuánto han ahorrado? Q. _ _ _ . _ _ _
0001-9998-quetzales
9999-no responde/no aplica

9. Le voy a leer una lista de alimentos para que me diga cuánto gastó en comprar de cada uno durante los últimos 15 días:

USE LAS SIGUIENTES PREGUNTAS PARA LLENAR EL CUADRO ABAJO:

a. Durante la última quincena, compró ud....?

- 0-no
- 1-si
- 9-no responde

b. Cuánto compró?

- 01-98-número
- 99-no responde/no aplica

- Unidad:
- 1-libra
 - 2-quintal
 - 3-unidad
 - 4-otro
 - 9-no responde/no aplica

c. A qué precio?
(por unidad)

Q.
9.99 no responde/no aplica

d. Costo total en la última quincena?

Q.
99.99 no responde/no aplica

e. Por lo general, cada cuanto lo compra?

- 1. diario
- 2. semanal
- 3. quincenal
- 4. cada 20 días
- 5. mensual
- 6. anual
- 9. no responde

alimento	si o no (a)	cuánto compró número unidad (b)	precio /unidad (c)	costo total por quincena (d)	frecuencia de compra (e)
maíz	--	----	Q.	Q.	----
arroz	--	----	Q.	Q.	----
harinas para atol o cocina	--	----	Q.	Q.	----
frijoles	--	----	Q.	Q.	----
pan	--	----	Q.	Q.	----
fideos	--	----	Q.	Q.	----
carne/res	--	----	Q.	Q.	----
carne/pollo	--	----	Q.	Q.	----
carne/cerdo	--	----	Q.	Q.	----
otra carne	--	----	Q.	Q.	----
leche fluida	--	----	Q.	Q.	----
leche polvo	--	----	Q.	Q.	----
incaparina	--	----	Q.	Q.	----
café	--	----	Q.	Q.	----
fresco de sobre	--	----	Q.	Q.	----
sopas de sobre	--	----	Q.	Q.	----
huevos	--	----	Q.	Q.	----
margarina	--	----	Q.	Q.	----
queso	--	----	Q.	Q.	----

alimento	si o no	cuánto compró	precio	costo total	frecuencia
	no	número unidad	/unidad	por quincena	de compra
	(a)	(b)	(c)	(d)	(e)
fruta	---	-----	Q.---	Q.---	-----
-----	---	-----	Q.---	Q.---	-----
fruta	---	-----	Q.---	Q.---	-----
-----	---	-----	Q.---	Q.---	-----
tomate	---	-----	Q.---	Q.---	-----
cebolla	---	-----	Q.---	Q.---	-----
yerbas	---	-----	Q.---	Q.---	-----
verdura	---	-----	Q.---	Q.---	-----
-----	---	-----	Q.---	Q.---	-----
verdura	---	-----	Q.---	Q.---	-----
-----	---	-----	Q.---	Q.---	-----
papa	---	-----	Q.---	Q.---	-----
manteca de	---	-----	Q.---	Q.---	-----
cerdo	---	-----	Q.---	Q.---	-----
aceite vegetal	---	-----	Q.---	Q.---	-----
azúcar	---	-----	Q.---	Q.---	-----
panela	---	-----	Q.---	Q.---	-----
sal	---	-----	Q.---	Q.---	-----
cal	---	-----	Q.---	Q.---	-----
otro	---	-----	Q.---	Q.---	-----
otro	---	-----	Q.---	Q.---	-----
leña	---	-----	Q.---	Q.---	-----
gas	---	-----	Q.---	Q.---	-----
candelas	---	-----	Q.---	Q.---	-----
pilas	---	-----	Q.---	Q.---	-----
fósforos	---	-----	Q.---	Q.---	-----
jabón	---	-----	Q.---	Q.---	-----
otro	---	-----	Q.---	Q.---	-----

10. Cuánto gasta en el molino a la quincena?
 00.00-98.99-quetzales y centavos Q. _____
 99.99-no responde

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OBSERVACIONES SOBRE LA VIVIENDA:

55. Material de la pared: -----
 2-caña
 3-bajareque
 4-ladrillo/block
 5-tabla
 6-madera
 7-otro-----
 9-no pudo observar
56. Material del piso: -----
 2-tierra
 3-cemento
 4-ladrillo
 5-granito/vinilo
 6-otro-----
 9-no pudo observar
57. Material del techo: -----
 2-paja
 3-lámina
 4-otro-----
 9-no pudo observar
58. Posee electricidad la vivienda -----
 0-no
 1-si
 9-no pudo observar
59. Donde consiguen el agua? -----
 1-río, riachuelo, manantial
 2-poso comunal
 3-llena cántaros
 4-red de tubería
 5-otro-----
 9-no pudo observar
60. Tiene letrina -----
 0-no
 1-si
 9-no pudo observar
61. Con qué cocina? -----
 1-leña
 2-estufa lorena
 3-estufa de gas kerosene
 9-no pudo observar

PREGUNTAS SOBRE LA POLITICA Y ORGANIZACION DE LOS SINDICATOS

1. ¿Cómo se llama el sindicato a que usted est afiliado? -----

2. ¿Qué tipo de sindicato es? -----

3. ¿Cual es la estructura del Comite Ejecutivo de su sindicato? -----

4. ¿Considera usted, que los dirigentes del sindicato deben capacitarse para desempeñar estas funciones? -----

5. ¿Qué tipo de capacitación deben recibir los dirigentes? -----

6. ¿Qué tipo de capacitación tecnica debería recibir una persona que est afiliada a un sindicato? -----

7. ¿Qué tipo de capacitación sindical debería recibir una persona que est afiliada a un sindicato? -----

8. ¿Sabe la fecha de fundación del sindicato? -----

9. ¿Cómo fue que se hizo el sindicato? -----

10. ¿Cu ntos afiliados tiene el sindicato? aproximadamente -----

exactamente -----

11. ¿Cu nto es su cuota mensual a su sindicato? -----

12. ¿Cu ndo fue que usted canceló la cuota? -----

13. ¿Est legalizado el sindicato? -----

Si lo est , ¿Cómo se legalizó? -----

¿En qué fecha? ----- ¿En qué año? -----

14. ¿Con qué frecuencia se reúnen los dirigentes? -----
 ¿Se reúnen más frecuentemente, lo mismo, o menos que el año pasado? -----
 ¿Existe un lugar especial para reuniones? -----
15. ¿Cuándo se afilió usted al sindicato? -----
16. ¿Existía ya el sindicato o participó usted al formarlo? -----

17. ¿Se afilió usted individualmente o como miembro de un grupo? -----

18. Si de un grupo, ¿el grupo estaba ya organizado o se organizó para este propósito? -----
19. ¿Qué servicios ofrece el sindicato?
 1 -----
 2 -----
 3 -----
20. ¿Cuál de estos servicios es más importante para usted? -----

21. ¿Cuál de estos servicios es de segunda importancia? -----

22. ¿Por qué decidió afiliarse al sindicato? -----

23. ¿Cuáles considera que son las razones principales para que exista el sindicato?
 1 -----
 2 -----
 3 -----
24. ¿Cuál considera que es la más importante de estas? -----

25. ¿Cuál es el papel del sindicato a nivel local? -----

26. ¿Conoce que es CUSG? -----
27. Si lo conoce, ¿Qué hace CUSG? -----

28. ¿Qué tipo de gente pertenece a CUSG? -----

29. A quienes conoce usted que son de la CUSG? -----

30. ¿Cómo calificaría el trabajo de CUSG? -----
31. ¿Cuáles son los principales problemas que tienen los sindicatos? -----
32. ¿Cuándo tienen problemas los sindicatos, con quien deben buscar apoyo? -----
33. Si un trabajador tiene problemas laborales, ¿dónde debe buscar apoyo para solucionarlos? -----
34. ¿Cree usted que todos los trabajadores deberían afiliarse a un sindicato? -----
35. ¿Tiene usted confianza en el sindicato como un apoyo a los trabajadores? -----
36. Según usted, ¿cuáles son las razones principales por las que un trabajador debe afiliarse a un sindicato? -----
37. ¿Qué ventajas le trae a un trabajador afiliarse al sindicato?
- 1 -----
- 2 -----
- 3 -----
38. ¿Cuál de estas ventajas, es la que más representa su propia situación con el sindicato? -----
39. Si le preguntan en la calle, qué es el sindicato, ¿Usted qué responde? -----
40. ¿Considera importante que exista relación entre el sindicato al que usted pertenece, con CUSG? SI ----- NO -----
¿Porqué? -----

41. Que servicios da la CUSG? -----

42. Son suficientes estos servicios? -----

43. ¿Le interesaría saber más sobre CUSG? -----

44. Considera usted que su sindicato est capacitado para enfrentar los problemas que tengan sus afiliados?

SI ----- NO -----

¿Porqué? -----

45. ¿Cu les piensa que son los rasgos esenciales de un país democrático? -----

46. ¿Es importante que los sindicatos tengan una participación en la vida política del país? SI ----- NO -----

Si lo es, ¿Porque? -----

47. ¿Cu l debe ser según usted, esta participación? -----

48. Abajo hay una lista de aspectos de la democracia y prácticas democráticas. ¿Qué tan importante siente usted que es cada una de estas prácticas en una sociedad democrática?

	MUY IMPORTANTE	REGULAR	NADA IMPORTANTE
a. Elecciones libres, limpias y de sufragio universal	1	2	3
b. Protección legal de los derechos civiles	1	2	3
c. Protección legal igual para todos	1	2	3

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d.	Ejército bajo el control del gobierno civil	1	2	3
e.	Promoción de oportunidades económicas por el gobierno	1	2	3
f.	Preservación y defensa de la vida humana por el gobierno	1	2	3
g.	Interés por la salud y la educación de todos por el gobierno	1	2	3
h.	Libertad de asociarse en los grupos y con la gente que uno quiere	1	2	3
i.	Libre tránsito de la gente dentro y fuera del país	1	2	3
j.	Libre expresión del pensamiento	1	2	3
k.	Representación de todos los grupos importantes en la vida política del país	1	2	3
l.	Defensa de los derechos humanos	1	2	3
m.	Libertad de culto y de religión	1	2	3
n.	Defensa y promoción de las culturas autóctonas	1	2	3