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EVALUATION REPORT

FOR

ANNUAL REVIEW

WASHINGTON, D.C.

JUNE 1975

by

University of South Florida

Basic Village Education

Guatemala

Government of Guatemala

Academy for Educational Development

United States Agency for International Development

EVALUATION REPORT

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## THE PROCESS OF EVALUATION

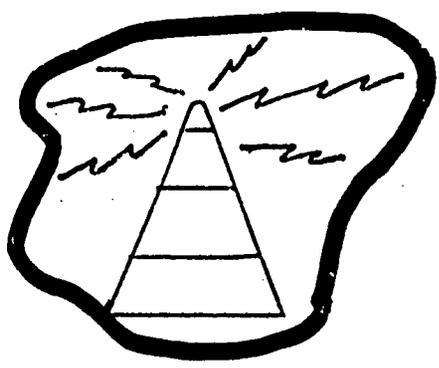
1. DEVELOPMENT OF THE RESEARCH DESIGN.
2. SELECTION OF THE AREAS FOR INTERVIEWING.
3. SELECTION OF THE FARMERS TO BE INTERVIEWED.
4. PREPARATION OF THE QUESTIONNAIRES.
5. SELECTION AND TRAINING OF INTERVIEWERS.
6. INTERVIEWING STRATEGY.
7. DATA PROCESSING.
8. ANALYSIS OF DATA.
9. INTERPRETATION OF RESULTS.

10. *Report results*

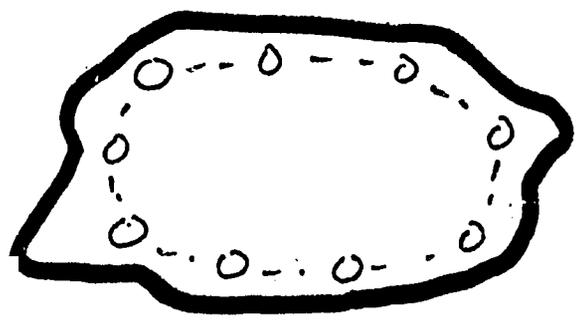
# EXPERIMENTAL TREATMENTS TO BE MEASURED IN BVE EVALUATION



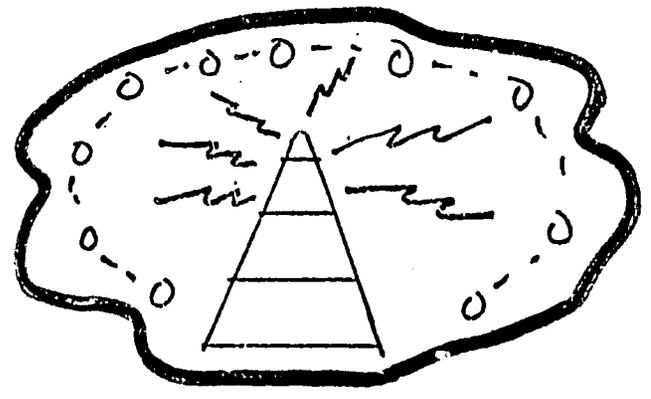
R = RADIO



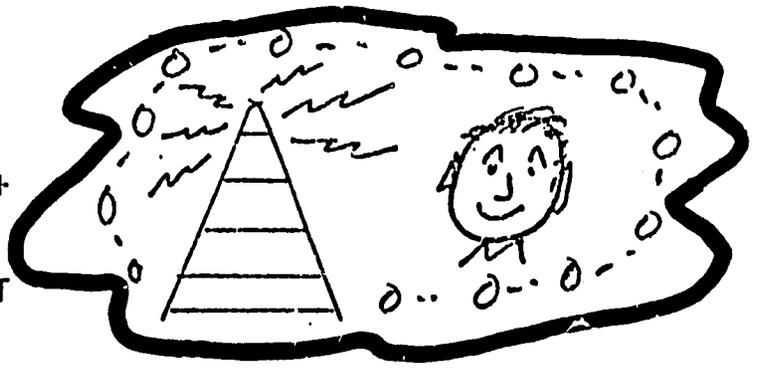
M = MONITOR



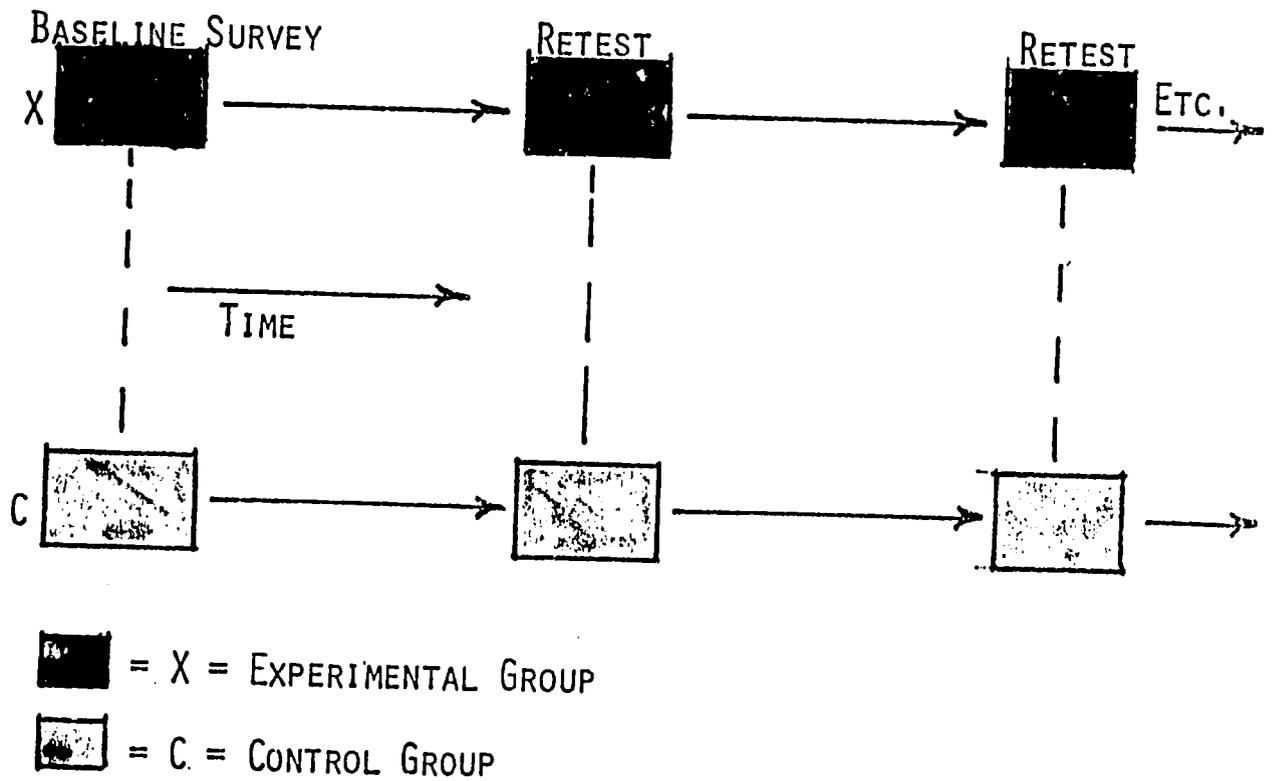
RM = RADIO +  
MONITOR



RMA = RADIO +  
MONITOR  
+  
AGRONOMIST

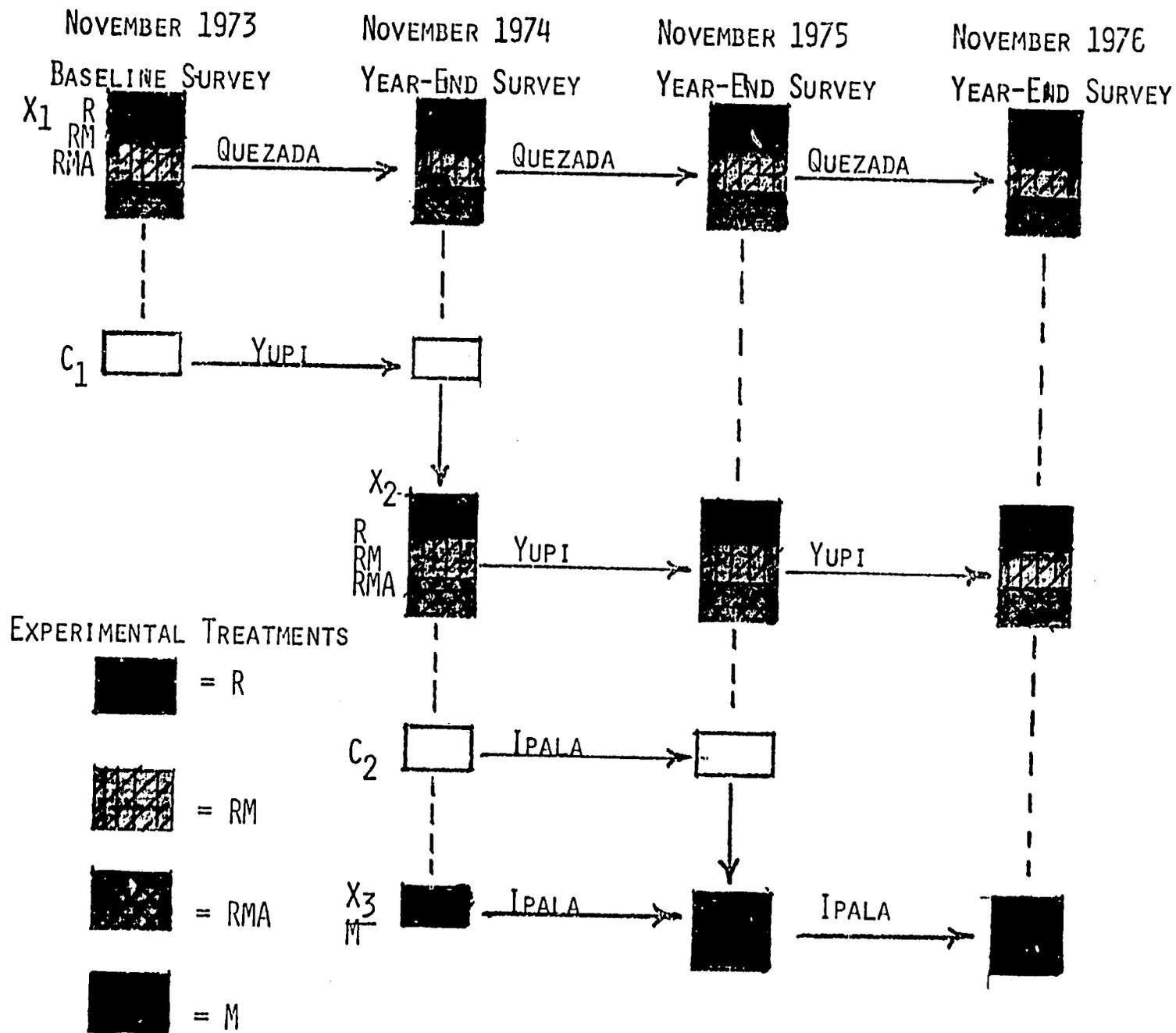


### BASIC FEATURES OF EXPERIMENTAL DESIGN



DESIGNED TO MEASURE THE RESULTS OF AN EXPERIMENTAL TREATMENT OVER TIME

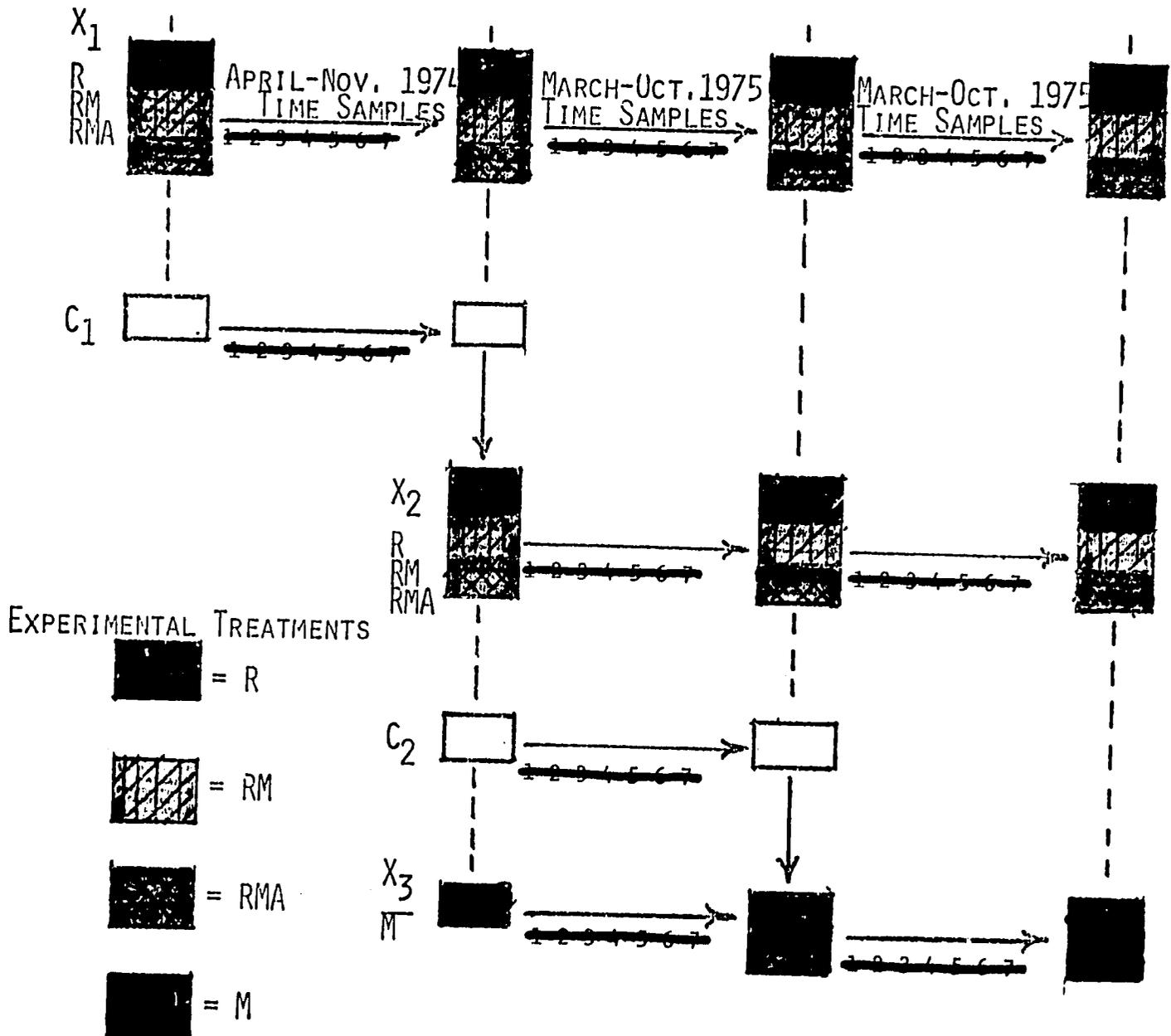
## EXPERIMENTAL DESIGN AS USED IN BVE EVALUATION ORIENTE AREA - SPANISH SPEAKING



**MEASURES CHANGE:**

1. OVER TIME FOR THREE YEARS
2. BY EXPERIMENTAL TREATMENTS
3. BY GEOGRAPHICAL AREA

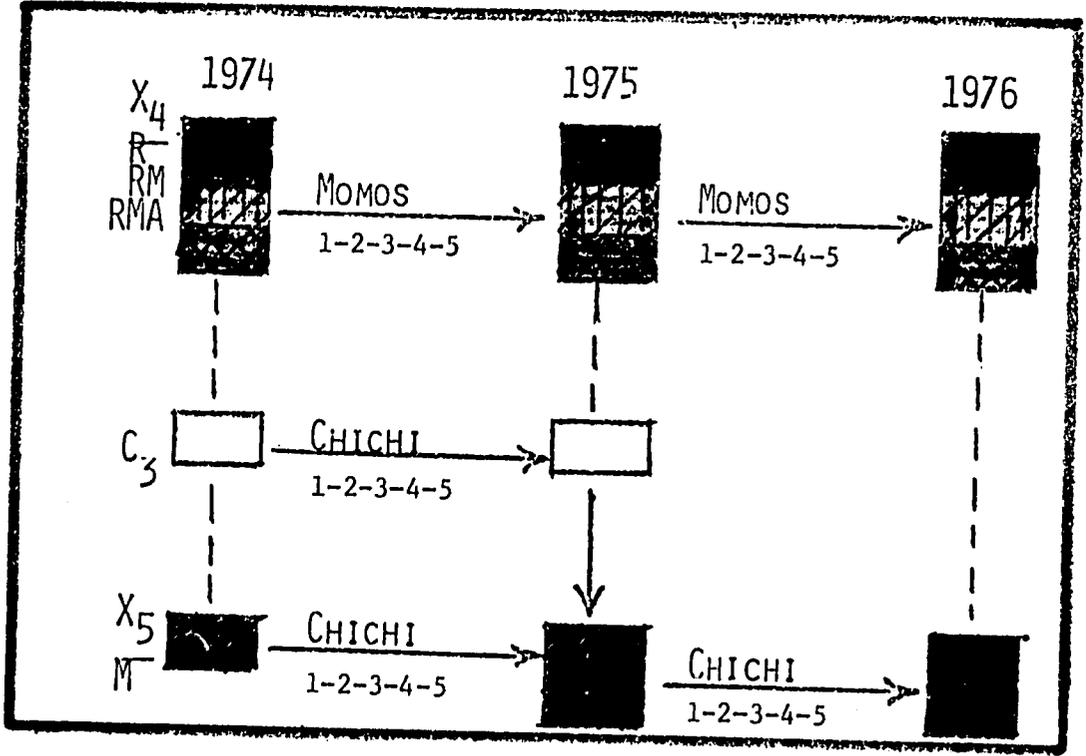
MONTHLY TIME SAMPLE-SURVEYS  
AS USED IN BVE EVALUATIONS  
ORIENTE AREA - SPANISH SPEAKING



MEASURES CHANGE:

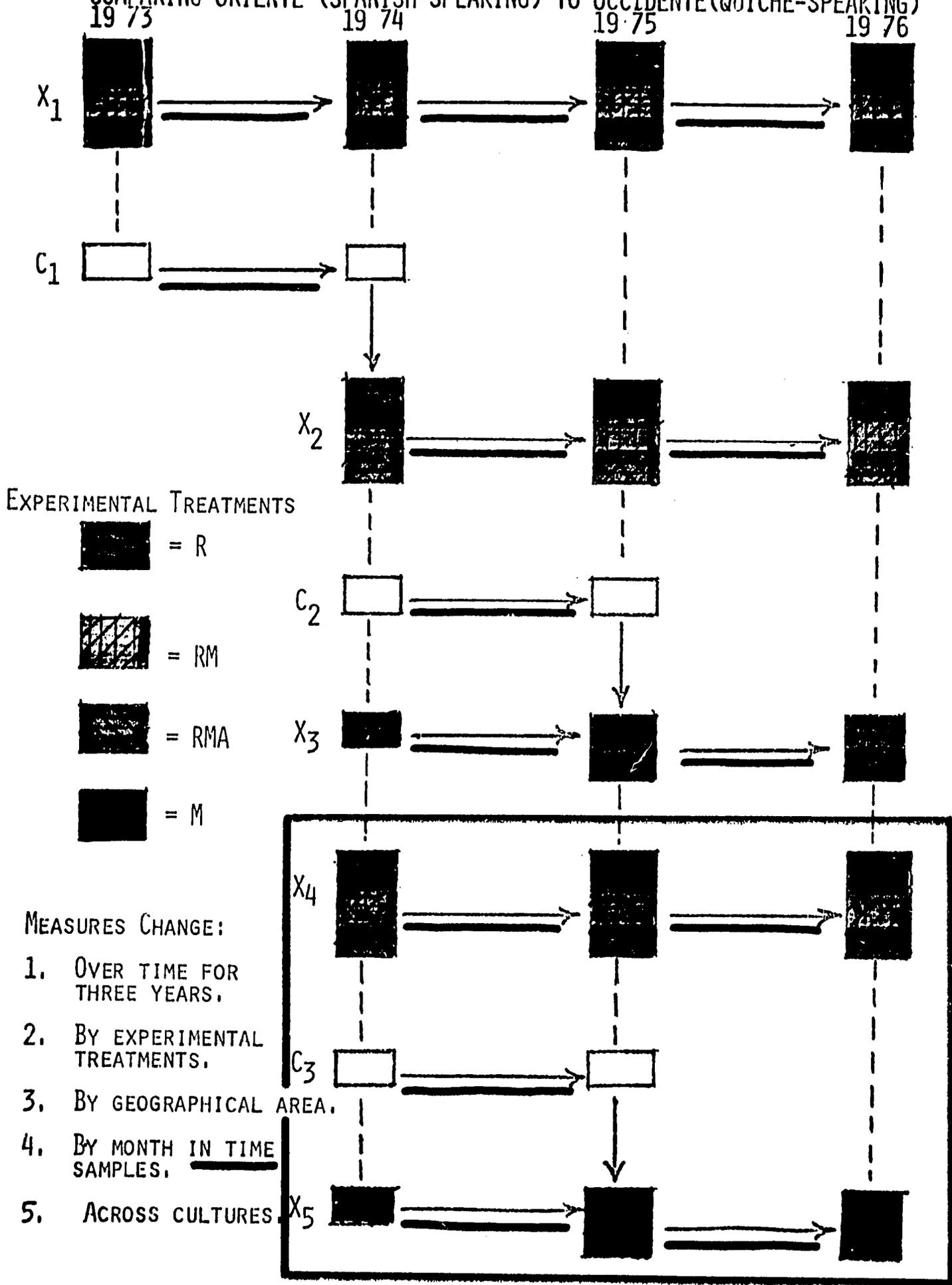
1. OVER TIME FOR THREE YEARS.
2. BY EXPERIMENTAL TREATMENTS.
3. BY GEOGRAPHICAL AREA.
4. BY MONTH FOR IMMEDIATE FEEDBACK TO PROGRAM AND TO HELP EXPLAIN LONG TERM CHANGES.

EXPERIMENTAL DESIGN AS USED IN BVE EVALUATION  
OCCIDENTE AREA - QUICHE SPEAKING

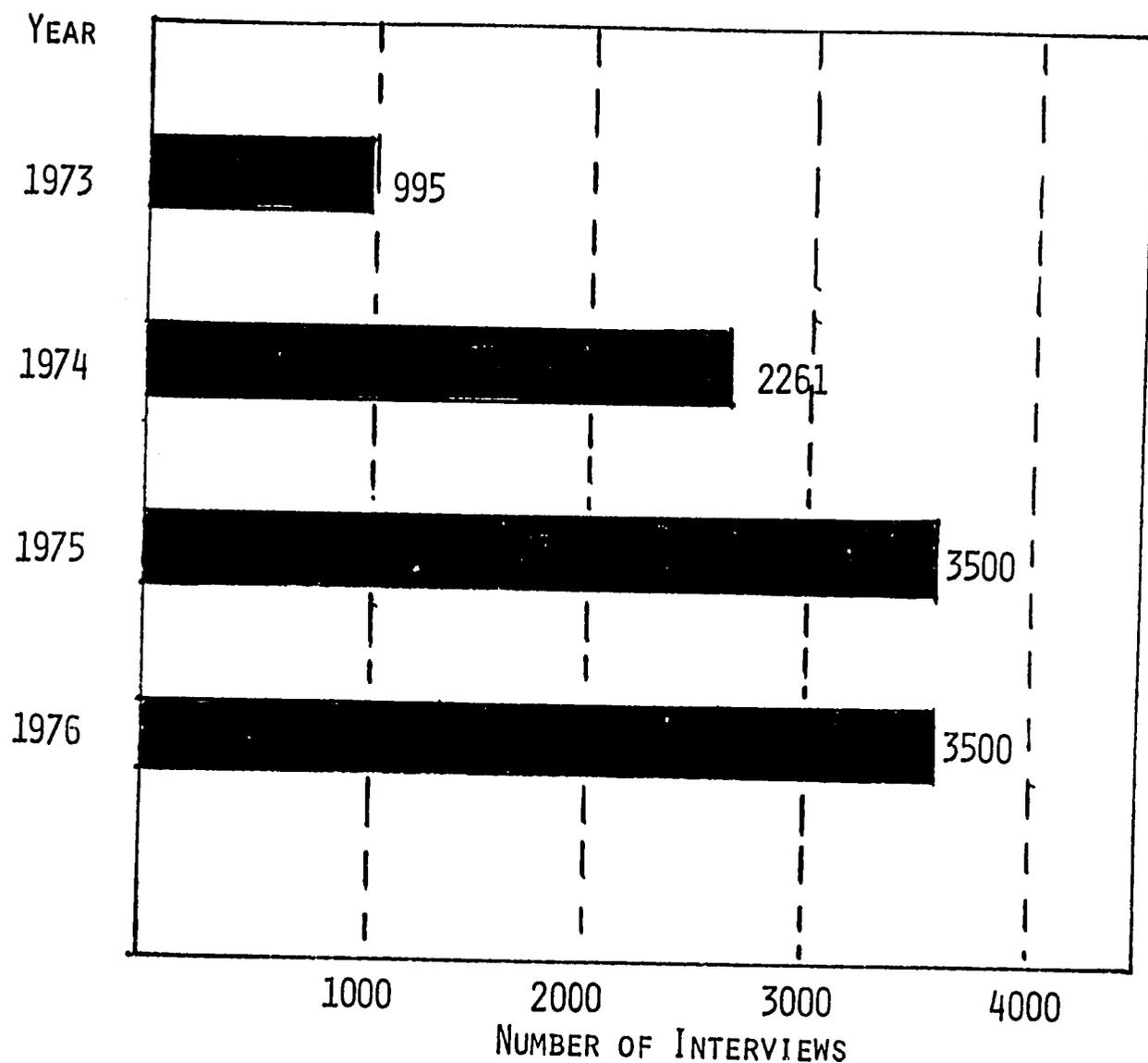


MEASURES CHANGE IN A NON-SPANISH CULTURAL AREA

COMPARING ORIENTE (SPANISH-SPEAKING) TO OCCIDENTE (QUICHE-SPEAKING)



# INTERVIEWS CONDUCTED AS PART OF BVE EVALUATION



DURING LIFE OF PROJECT:  
APPROXIMATELY 10,250 SEPARATE INTERVIEWS  
WITH 1561 FARMERS  
IN 49 VILLAGES  
IN 14 TREATMENT AREAS  
IN 5 MAJOR GEOGRAPHICAL AREAS, AND  
IN 2 CONTRASTING CULTURES.

## RESULTS OF EVALUATION

- I. WHAT CHANGES EXPECTED?
- II. WHAT LEVEL OF CHANGE?
- III. WHO CHANGES?
- IV. HOW MUCH AND WITH WHICH TREATMENTS?

## RESULTS OF EVALUATION

### I. WHAT CHANGES EXPECTED:

--AGRICULTURAL PRACTICES

-- ALSO --EDUCATIONAL LEVEL

--HEALTH PRACTICES

--DIET

--HOME IMPROVEMENTS

## RESULTS OF EVALUATION

## II. WHAT LEVEL OF CHANGES

K - KNOWLEDGE

"I KNOW THAT 200 POUNDS OF COMPLETE FERTILIZER SHOULD BE APPLIED PER MANZANA AT THE TIME CORN IS PLANTED."

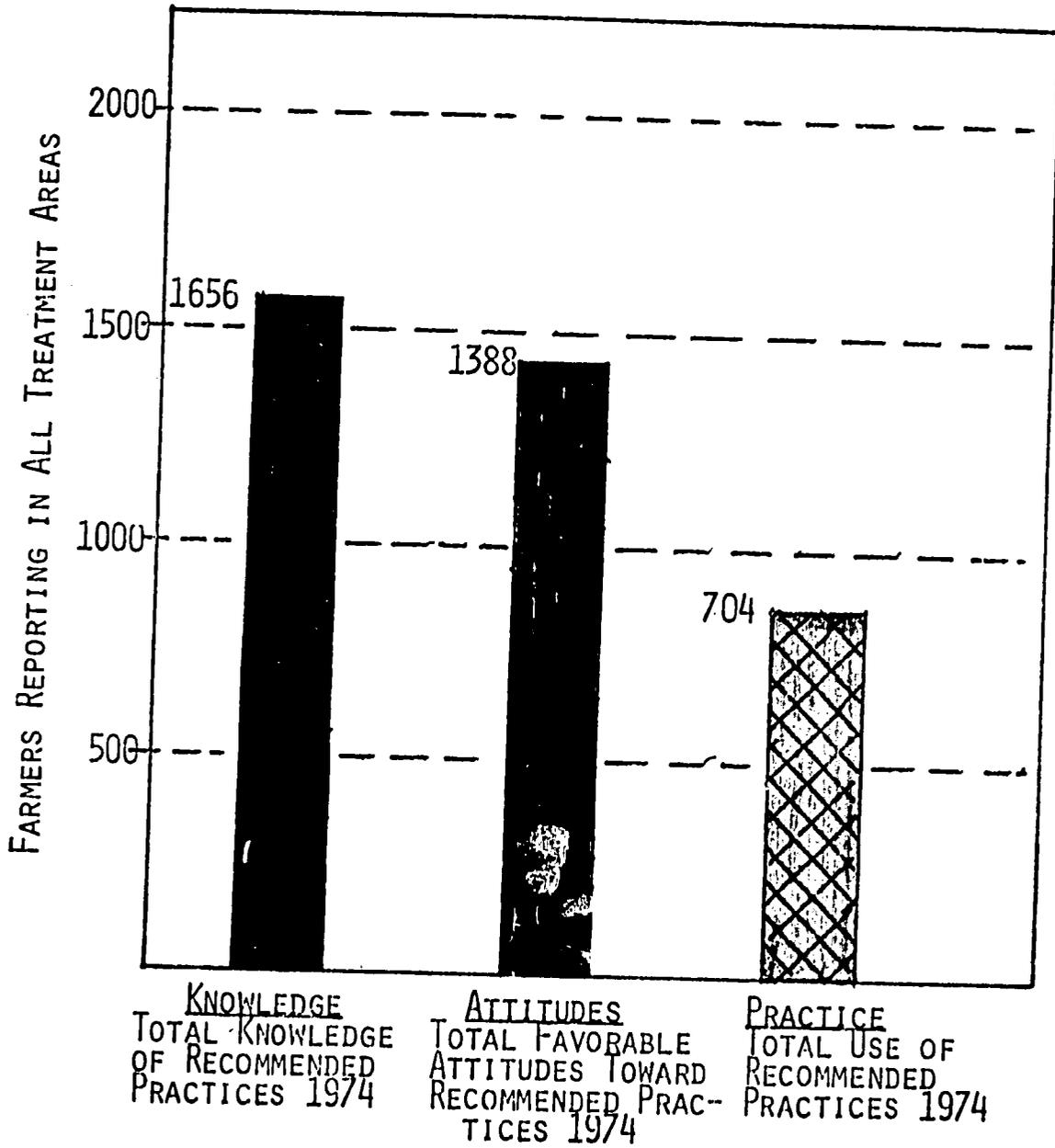
A - ATTITUDES

"I FEEL THAT IT IS BEST TO USE 200 POUNDS OF COMPLETE FERTILIZER PER MANZANA AT THE TIME CORN IS PLANTED AND PLAN TO USE IT IF I CAN GET FERTILIZER AND CREDIT."

P - PRACTICES

"I USED 200 POUNDS OF COMPLETE FERTILIZER PER MANZANA AT THE TIME CORN WAS PLANTED EXACTLY AS WAS RECOMMENDED BY RADIO QUEZADA"

### COMPARISON OF KNOWLEDGE, ATTITUDES AND USE OF RECOMMENDED PRACTICES 1974



SOURCE: 1974 TIME SAMPLES III - VII

## RESULTS OF EVALUATION

### III. WHO CHANGES?

- OLD/YOUNG
- SPANISH-SPEAKING/QUICHE-SPEAKING
- LITERATE/ILLITERATE
- LARGER FARMS/SMALLER FARMS

**CHARACTERISTICS OF SUBSISTENCE FARMERS  
PARTICIPATING IN BVE EVALUATION**

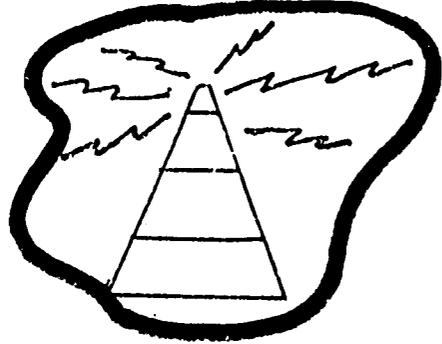
|  | <u>ORIENTE</u> | <u>OCCIDENTE</u> |
|--|----------------|------------------|
| LANGUAGE SPOKEN                              | SPANISH        | QUICHE           |
| LITERATE (%)                                 | 46             | 34               |
| ATTENDED SCHOOL (%)                          | 37             | 23               |
| AVERAGE YEARS OF SCHOOL ATTENDED (ATTENDERS) | 2.5            | 2.3              |
| LISTEN TO RADIO DAILY (%)                    | 92             | 54               |
| SANITARY TOILET FACILITIES (%)               | 8              | 10               |
| FULL-TIME FARMERS (%)                        | 100            | 98               |
| OWN LAND (%)                                 | 81             | 99               |
| AMOUNT OF LAND OWNED (ACRES)                 | 5              | 4                |
| USE INSECTICIDES (%)                         | 37             | 29               |
| AVERAGE CORN YIELD (BUSHEL/ACRE)             | 11             | 19               |
| USE CREDIT (%)                               | 18             | 25               |
| USE FERTILIZER (%)                           | 11             | 15               |

# RESULTS OF EVALUATION

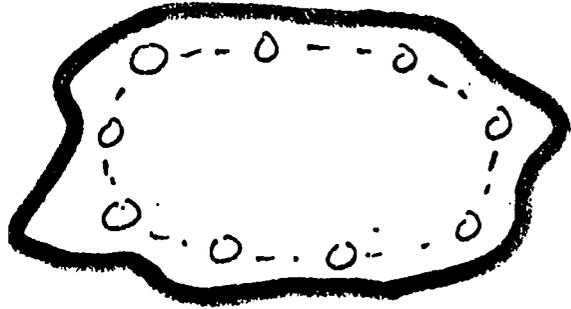
## IV. WITH WHICH TREATMENTS?



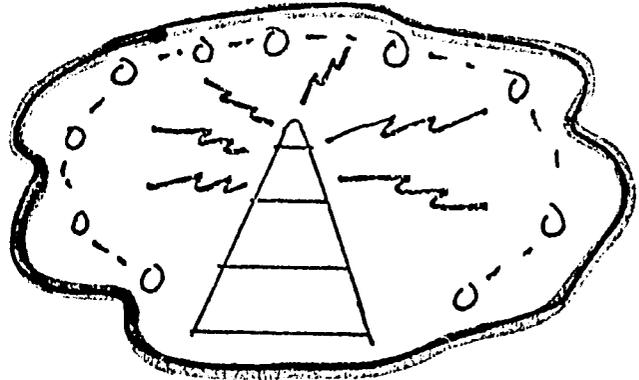
R = RADIO



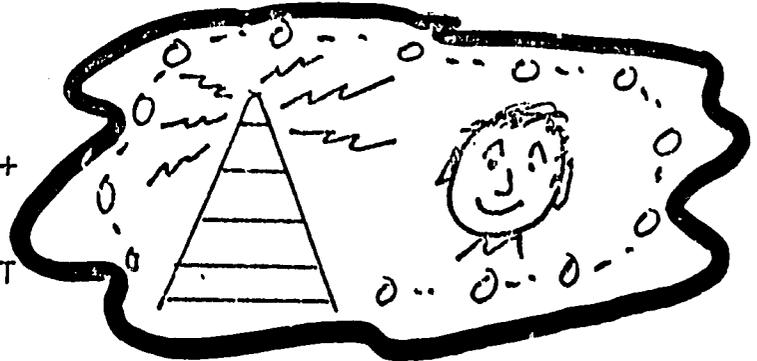
M = MONITOR



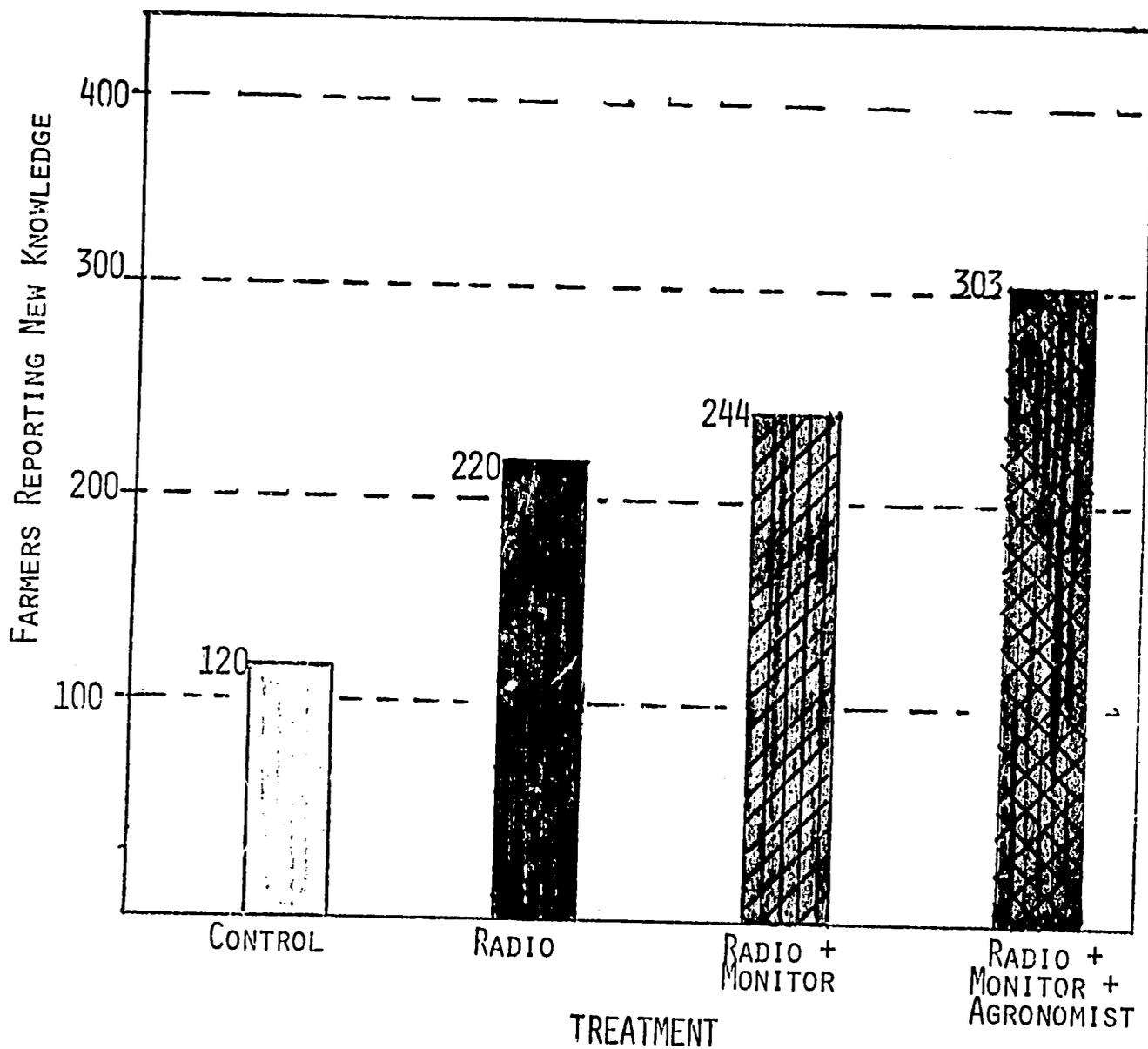
RM = RADIO +  
MONITOR



RMA = RADIO +  
MONITOR  
+  
AGRONOMIST

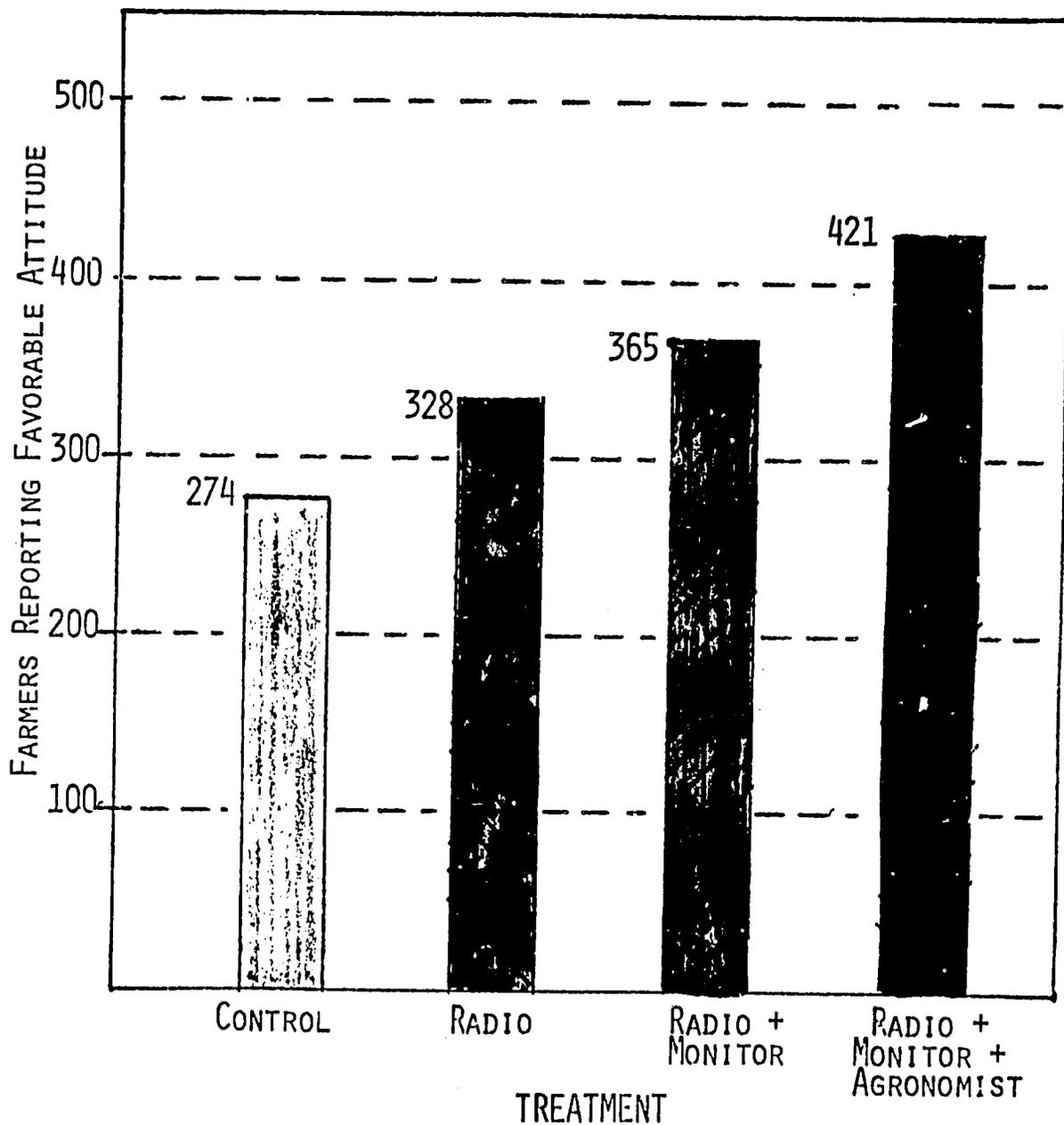


## NEW KNOWLEDGE OF RECOMMENDED PRACTICES REPORTED 1974

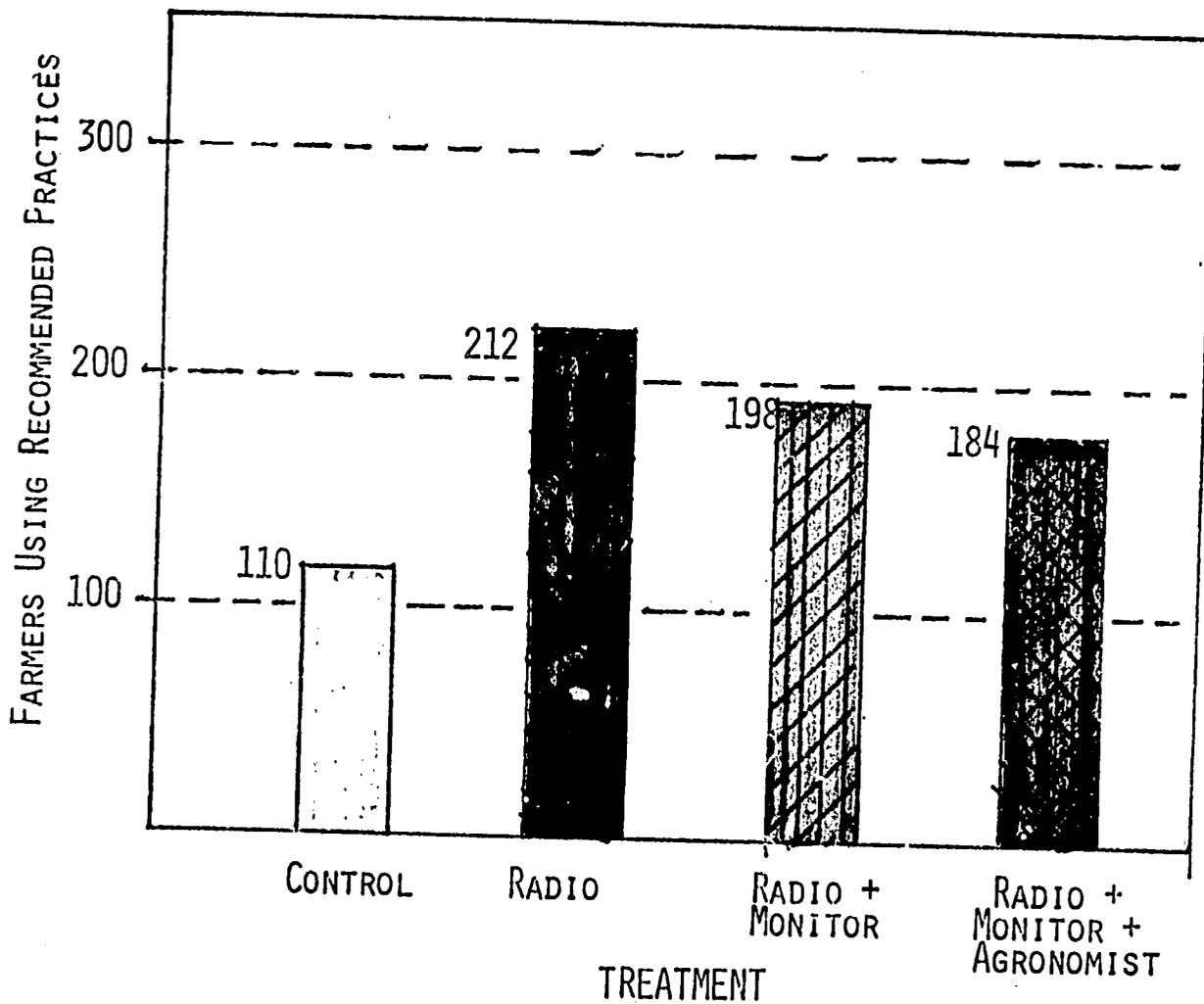


SOURCE: 1974 TIME SAMPLES III - VII

## FAVORABLE ATTITUDES TOWARD RECOMMENDED PRACTICES REPORTED 1974



SOURCE: 1974 TIME SAMPLES III - VII

USE OF RECOMMENDED PRACTICES REPORTED 1974

SOURCE: 1974 TIME SAMPLES V - VII

**Selected Materials for Annual Review**

**from**

**Preliminary Report Series**

**BASIC VILLAGE EDUCATION PROJECT**

**GUATEMALA**

Reports in this series are working papers prepared for circulation to a limited audience for comment and suggestions. Although the reports are written by specific individuals associated with the Project, contributions of the entire Project Staff are gratefully acknowledged. Contents are tentative and not to be quoted.

**Government of Guatemala**

**Academy for Educational Development**

**United States Agency for International Development**

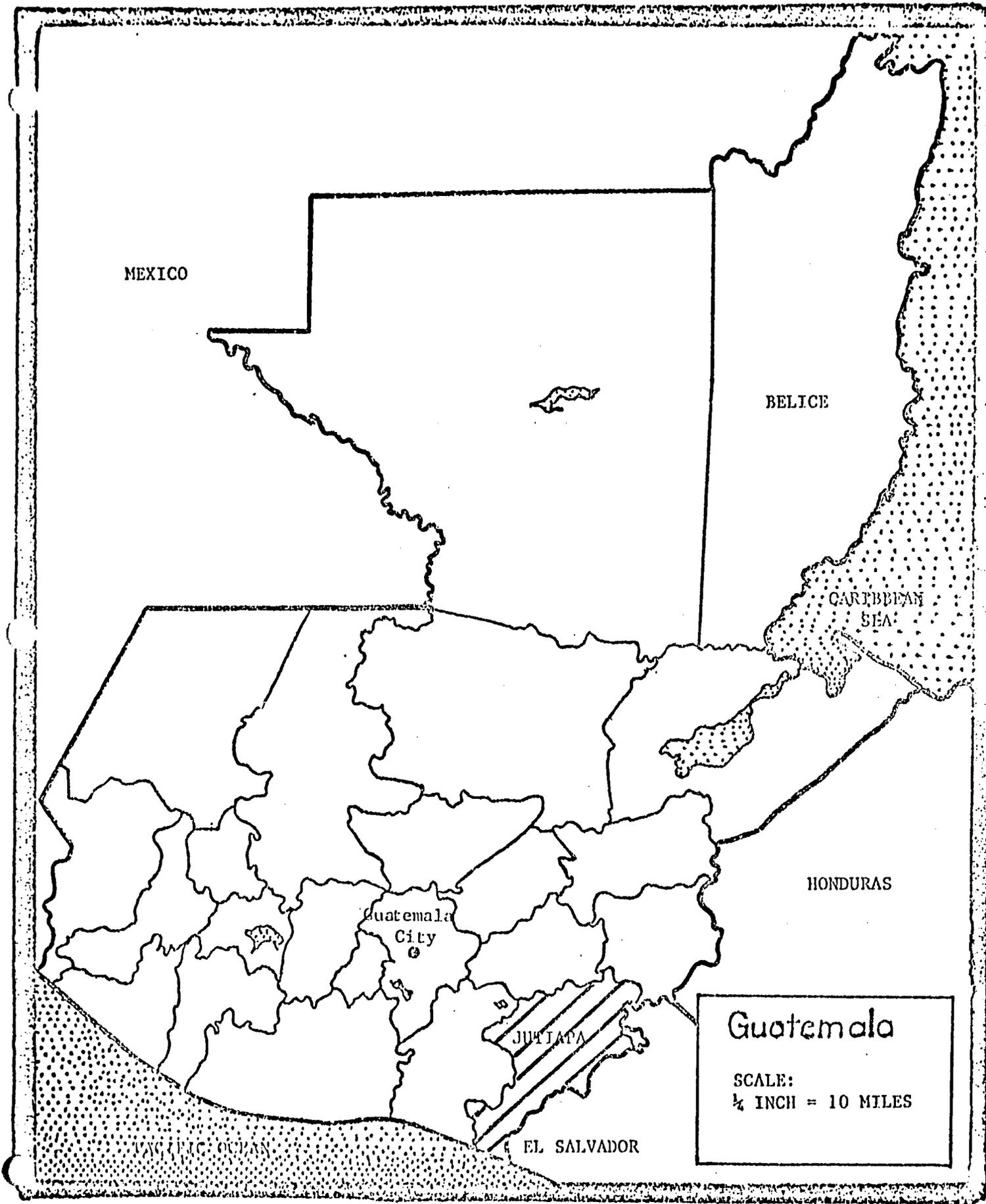


FIGURE I

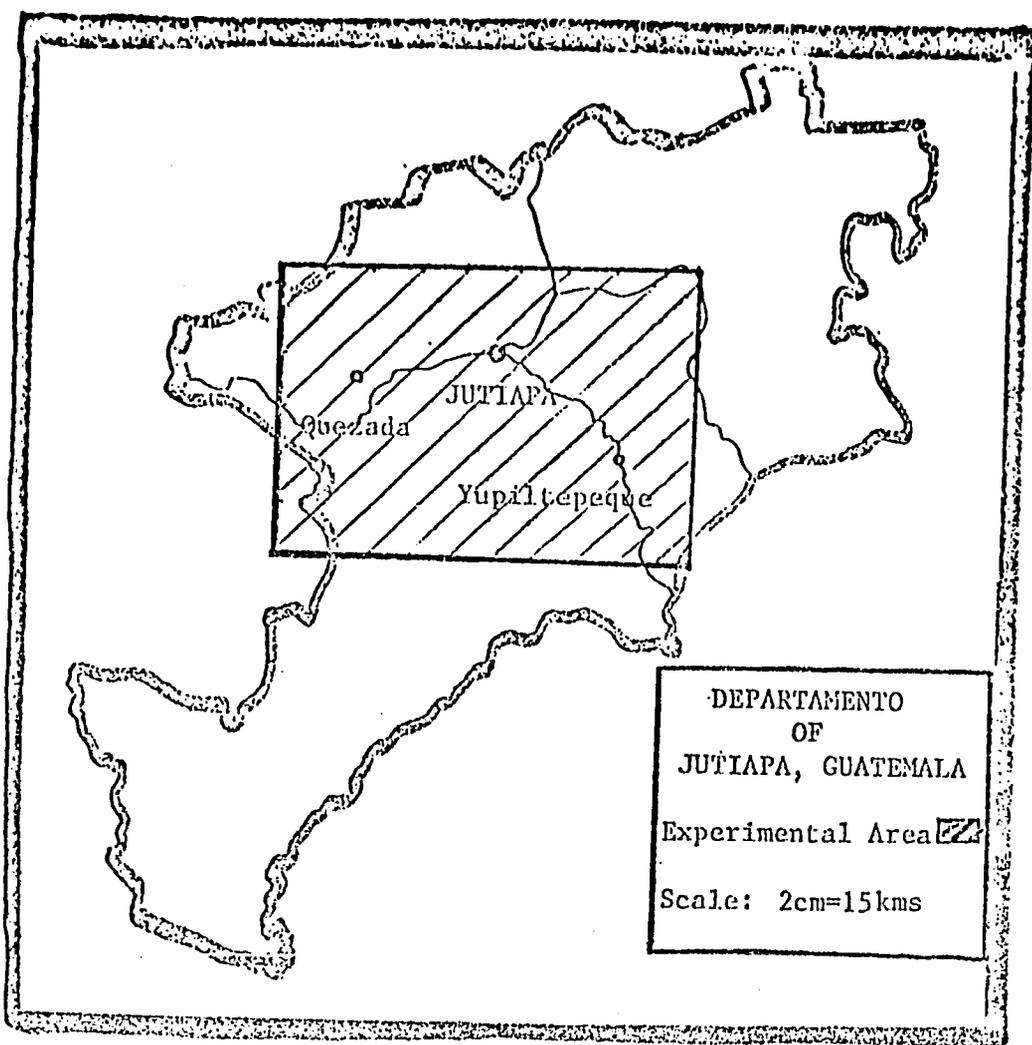


FIGURE II

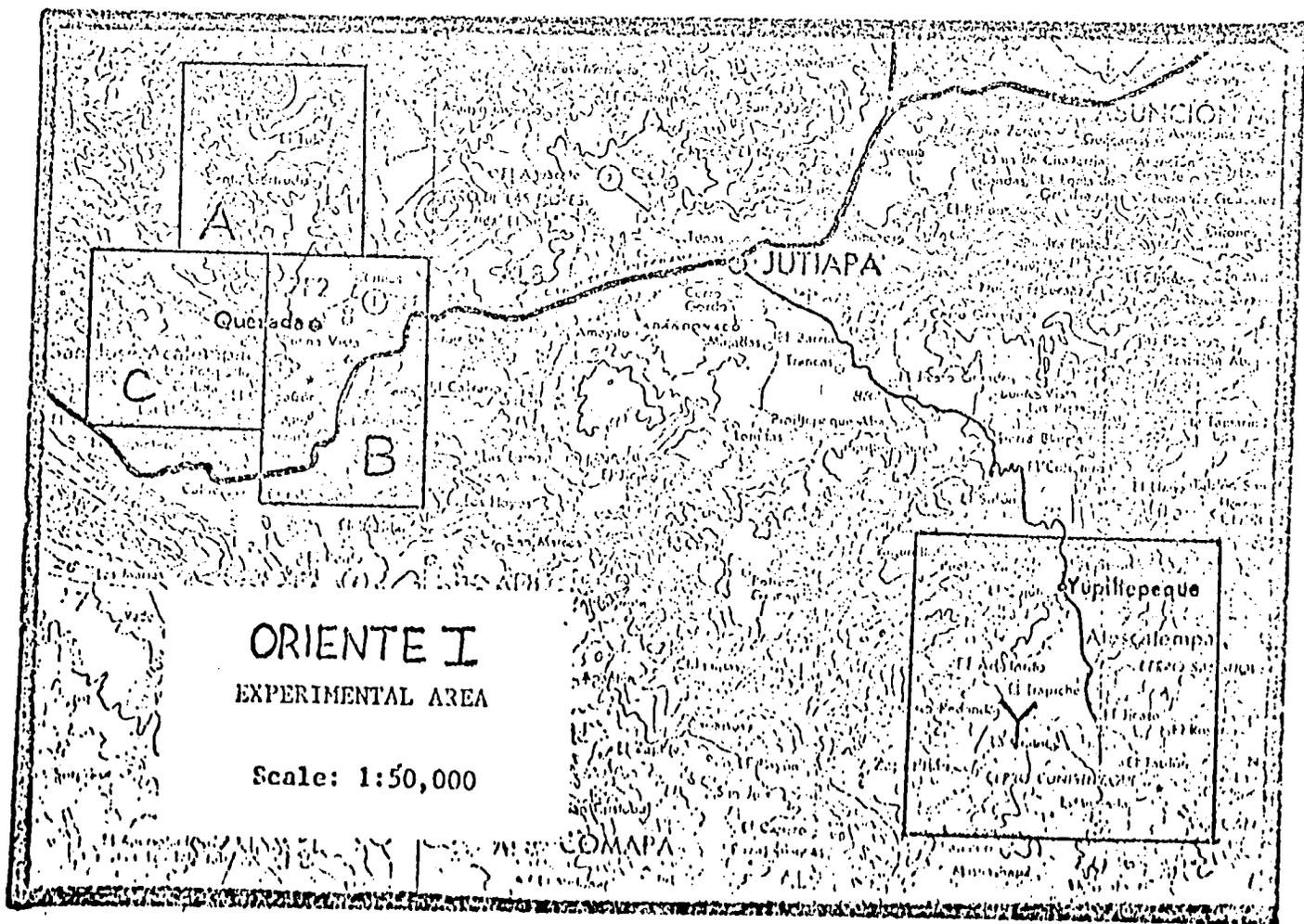


FIGURE III

## BASIC VILLAGE EDUCATION\*

Guatemala's national development plan encompasses many programs to help rural families improve their education, agriculture, living conditions, and communities. Using traditional extension methods, the number of families reached by such programs is limited. A much larger proportion of the rural population can be served, however, if the efforts of agents, promoters, teachers, etc., can be reinforced through use of modern communications techniques.

The Basic Village Education Project (BVE) is an experimental program of non-formal adult education which does not initially require literacy. It seeks to determine the effectiveness and relative costs of selected combinations of communications media that have potential for use in development programs where resources are limited.

The primary audience for BVE is the small, often illiterate subsistence farmer. Program content stresses information that will help that farmer to improve his production and income from basic grain crops. When fully operational, the Project will include matched experimental and control areas in eastern Guatemala (Oriente) and in the Quiché-speaking Indian Highlands of western Guatemala (Occidente).

### Evaluation

The first step in evaluation of the Basic Village Education Program is a baseline study to establish present knowledge, attitudes, farming practices, production, and income of farmers. Additional characteristics relating to communications, nutrition, health, mobility, and living conditions are also included in the study. That information provides the base against which change induced by the Program can be measured.

Baseline data for the 1974 area of action were obtained by interviewing approximately 200 farmers from fifteen communities in the experimental area, and more than 100 farmers from five communities in the control area. Names of farmers to be included in the sample were drawn from the census lists, using standard statistical procedures.

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\*The Basic Village Education Project is jointly funded by the Government of Guatemala and the United States Agency for International Development in accordance with terms of an agreement between the two governments. It is administered in Guatemala by the Guatemalan Ministry of Education in collaboration with the Ministries of Agriculture and Health. Foreign personnel and other technical assistance is provided by the Academy for Educational Development supported under contract No. AID/CM/1a-C-73-19 with the United States Agency for International Development. Responsibility for an independent evaluation of the Project rests with the University of South Florida through a sub-contract with the Academy for Educational Development.

The study was conducted in two phases. All farmers in the sample were interviewed in September 1973, to obtain general information. Two months later, the same farmers were interviewed again to obtain more information about agriculture in the areas. At the time of the second interview, every fifth person in the sample was also interviewed in depth by an agronomist.\*

#### Purpose of the Working Papers

The working papers represent an intermediate step in the process of reporting the findings from this unique experimental program in non-formal education. These papers are circulated to a limited audience for comments and suggestions. At a later date necessary revisions and corrections will be made so that the papers can be circulated to a wider audience through the Academy for Educational Development or other suitable publishing outlets.

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\*Taken from: "Basic Village Education: An Experiment in Non-Formal Adult Education" Guatemala City: Programa de Educacion Basica Rural, April, 1974, pp. 1, 2 and 4.

## PART II

BASIC VILLAGE EDUCATION IN GUATEMALA:  
EVALUATION OF AN EXPERIMENT IN NON-FORMAL EDUCATION  
REPORT OF FIRST YEAR'S PROGRESS

Thomas A. Rich  
Edgar G. Nesman

JULY 1974

## I. THE EVALUATION COMPONENT: AN OVERVIEW OF 1973-74

### A. Program Requirements

The Basic Villages Education Project (BVE) is an experimental program of information and agricultural education for the rural adult in Guatemala. The objective of the experiment is to determine the effectiveness and relative costs of different mixes of communications media, used to supplement the work of extension agents (limited in number) in influencing change in agricultural practices and production among the Ladino (Spanish speaking) and Indians (Quiche speaking) of rural Guatemala.

The objective of the services to be provided by evaluation component is to measure the differential effectiveness of the series of communications treatments with respect to changes in knowledge, attitude, practice and production about agriculture on the part of the rural Guatemalan family, particularly the male farmer. The evaluation is directed toward those changes between the experimental and control areas chosen by AID and the Government of Guatemala with the assistance of the evaluation component for the BVE Project and toward changes within the experimental areas subjected to the following three different levels of treatment, each treatment area including five villages with populations of approximately 125 families:

Treatment No. 1 - Radio broadcasts alone.

Treatment No. 2 - Radio broadcasts with additional audio and visual materials and organized radio forums.

Treatment No. 3 - Same as No. 2, with the addition of extension agent services.

It is with the above objective in mind that the following activities have been carried out during the 1973-74 year. In terms of the evaluation component personnel there are two working periods, the first, beginning in July, was carried out on the basis of consultation as time permitted. The second, which began in January was within the agreements of a contract between the Academy for Educational Development and the University of South Florida. The evaluation specialists involved were the same in both cases.

### B. Basic Design of the Project

The evaluation personnel assisted in the planning and design of the overall project from its earliest stages. In the consultations of March and July of 1973, the basic experimental design was considered as a fundamental part of the project. This has continued up to the present day with the result that the evaluation component is an integral part of the total project.

### C. Preliminary Survey and Site Selection

During the 1973 summer months, the evaluation personnel assisted the field personnel in the different aspects of site selection for the first experimental area. This included a number of trips into promising areas followed by a review of the available census data on those areas. The field personnel conducted an in-depth reconnaissance survey to determine the agricultural characteristics before final selection. The Quesada Valley was chosen as the experimental area and

Yupiltepecque as a control.

#### D. Base-Line Survey, First Phase

During the months of September and October, 506 farmers were interviewed in the experimental and control areas mentioned above. Prior to this, a number of preparatory steps were necessary: 1) selection of the sample for interview; 2) developing the strategy for interviewing; 3) selection and training of the interviewers; and 4) developing the questionnaire. The questionnaire development began even prior to site selection and was based on a review of the literature related to non-formal education and agricultural practice adoption as well as many years of personal experience by the evaluation personnel. Many revisions of the questionnaire were made prior to the pre-test in the field.

The results of the survey were processed and available for analysis and field use in the last week in October. The steps in processing were as follows: 1) checking the questionnaires in the field; 2) transferring the data to lay-out sheets; 3) key punching the computer cards; 4) assisting in the development of the computer program; and 5) interpretation of the computer print-out.

All of the information from the first phase of the base-line survey will be used as a starting point for the measurement of changes as a result of the educational program. In addition to the use in the future, preliminary analysis has been initiated. A summary is found in Appendix A.

#### E. Base-Line Survey, Second Phase (Agriculture)

In November, the interviewers returned to the field to do the second round of interviewing. There were 489 of the original 506 that were available for reinterviewing. Many of the same steps were followed as in the first phase: 1) the development of an interview strategy plan; 2) additional training of the interviewers; 3) questionnaire preparation; 4) questionnaire pre-test; 5) field checking of questionnaires; 6) transfer of data on sense sheets; 7) electronic preparation of computer cards; 8) development of the computer program; and 9) interpretation of the computer output after processing was finished.

This information was also made available for immediate field use as well as being retained for measurement of change. The computer output has been summarized and is found in Appendix B.

#### F. Intensive Agricultural Survey

An intensive agricultural survey was conducted at the same time as the second phase interviewing was in process. A random sample of one-in-five was selected for this survey. The evaluation personnel assisted in the different steps of the process although the major responsibility rested with the agricultural field personnel.

#### G. Time Sample Survey #1

The educational radio station was inaugurated on Saturday, March 23. On the following Monday the first round of time sample interviewing began and continued through April. Prior to this a number of steps were necessary: 1) development of the interview strategy plan; 2) development of the system for selection of the monthly sub-sample; and 3) the preparation of the questionnaire.

The usual steps were followed in processing the data: 1) field checking of the questionnaires; 2) transfer of data to sense sheets; 3) electronic punching of computer cards; 4) development of the computer program; and 5) interpretation of the computer output after processing.

The output of the first time sample has been added to the accumulated data from the base-line surveys. All surveys have been indexed so that change can be measured at the level of the individual, the village, the experimental sub-area, and the total area. The computer printout of the first time sample was available for analysis and field use in May. In addition, a summary has been prepared and is found in Appendix C.

## H. Continued Time Sampling

The same steps outlined in Time Sample #1 have been continued. The second round of time sampling was finished in May and is ready for computer processing. As of July 1, 1974, the third survey has been completed in the field and will be prepared soon for processing. The questionnaire for the fourth round has been revised in the direction of increased reliability and validity. Time sampling will continue up to October when the year-end survey will be conducted.

## I. Preparation for 1974-75

Since January 1974, considerable time has been dedicated to site selection and design review for the expanded program of 1974-75. In conjunction with this, a review of personnel and budget requirements for the evaluation component was undertaken in June. The projected work load for the next period is approximately three times that of the period just ending. The experiences from the first year will be helpful for the second year but careful planning will be necessary to coordinate all of the required activities.

## J. Educational Aspects of Evaluation

Many of the evaluation activities have had direct educational or training implications. A partial list continues: 1) field interviewers - through training sessions, field experience and explanation of the total evaluation process; 2) field supervisors - through explanation of the total process, field experience and provision of written materials; 3) project administrators - through explanation, written material and informal discussions; 4) international development personnel through participation in international meetings and explanation to visitors in the field; 5) university colleagues - through interchange in forums at professional meetings and informal conversations; 6) graduate students - as graduate assistants on the project and in graduate seminars; 7) undergraduate students - in classes on Research Methods, Social Change, Social Psychology, Central American Societies, and Introductory Sociology as well as participation as data coders and in informal discussions; and 8) the public - through radio and newspaper coverage and invited talks.

to hire 1/17

## II. BACKGROUND

Interest in development and modernization has been stimulated by recognition of rapid population increases, food shortages, and the mounting evidence of the crippling effects of severe nutritional deficiencies on human growth and potential. The traditional subsistence economy, with mounting population pressures and concomitant low yield farm practices has become the special target of development programs through formal and nonformal education, agricultural improvement practices, and health and nutrition improvement practices.

**BASIC VILLAGE EDUCATION****GUATEMALA****EVALUATION REPORTS****Working Paper No. 1****THE GENERAL CHARACTERISTICS OF SUBSISTENCE FARMERS  
IN THE DEPARTMENT OF JUTIAPA, GUATEMALA****THOMAS A. RICH****EDGAR G. NESMAN**

The Basic Village Education Project is jointly funded by the Government of Guatemala and the United States Agency for International Development in accordance with terms of an agreement between the two governments. It is administered in Guatemala by the Guatemalan Ministry of Education, and USAID provides foreign personnel and other assistance through a contract with the Academy for Educational Development. Responsibility for an independent evaluation of the Project rests with the University of South Florida through a sub-contract with the Academy for Educational Development.

**UNIVERSITY OF SOUTH FLORIDA****TAMPA, FLORIDA****OCTOBER, 1974****An Affirmative Action Equal Opportunity Institution**

### SUMMARY

The farmers in the Department of Jutiapa that were chosen for interviewing meet most of the characteristics of subsistence farmers in other parts of the world. They operate small farms which they own themselves and make all the decisions related to production. Their production is limited to a few basic crops (corn and beans with some sorghum) that is for home consumption. Their diet includes a few other items that are usually purchased once a week on a visit to the village or regional marketing center. Travel is limited to these market trips except for a yearly trip to Guatemala City, to the coast for seasonal work to supplement the family income, or to a religious center.

The educational levels are low and most are not literate. New information comes by way of friends and neighbors or radio except for the few who have had contact with agricultural technicians.

The homes are owned and of simple construction. Tile roofs, adobe walls and dirt floors predominate. Sanitary facilities and assurance of pure water are lacking.

These farmers have high educational aspirations for their children and would still choose to be farmers if they had their choice of other jobs.

WORKING PAPER NO. 2

THE AGRICULTURAL CHARACTERISTICS OF SUBSISTENCE FARMERS  
IN THE DEPARTMENT OF JUTIAPA, GUATEMALA

Edgar G. Nesman

Thomas A. Rich

UNIVERSITY OF SOUTH FLORIDA

TAMPA, FLORIDA

FEBRUARY, 1975

An Affirmative Action Equal Opportunity Institution

## SUMMARY

The following summary statements are very general in nature but will serve to give a brief profile of the agricultural characteristics of the subsistence farmers in the Department of Jutiapa in southeastern Guatemala.

1. The land holdings are small (6.7 acres) and usually owner operated. They are fragmented into several pieces and often at some distance from each other. Most of the land is useable for cropping and the farmers feel that it is good land but could be more productive.
2. The cropping system common to the area includes corn as the most important crop followed by beans and sorghum. Tobacco, rice, vegetables or other crops are planted but only in some regions. Beans are usually planted with either corn or sorghum and a second crop is often planted after the first one is harvested. The farmers are generally optimistic about the yields.
3. As to specific crops, corn is planted by everyone with an average area of 1.9 manzanas (3.2 acres) and an average yield of approximately 15 qq/mza (9 cwt/acre) in 1973; beans are planted by most farmers also with an average area of 1.14 manzanas (1.9 acres) and an average yield of .65 qq/cda (6.1 cwt/acre) in 1973; and sorghum is planted but not as common as corn or beans with an average area planted of 1.5 manzanas (2.6 acres) and average yield of 15 qq/mza (9 cwt/acre) in 1973.
4. Land preparation for planting is usually done by hand although slightly over half of the farmers do use oxen for plowing. Very few have used tractors. A few of the farmers have their own oxen. Horses are common but are not used in field labor. There are a few mules in the area but they are used for transportation, much as the horses.
5. Seeds are most often selected from the prior year's harvest. Due to an apparent misunderstanding of the nature of hybrid corn seed, most farmers are planting a degenerated hybrid variety. Many are also planting selected native corn seed. A small percentage (10%) are planting purchased seed that is a true hybrid and/or certified.
6. Fertilizers were used by half of the farmers in 1973. The amounts used were usually less than 2 qq/mza (1.2 cwt/acre) and of an incomplete formula type.
7. Insect damage was reported by many of the farmers although only half of those reporting used insecticides. The insecticides were usually used on corn.
8. Plant diseases are not commonly known by name but one-half of the farmers reported problems. Only a few have used chemicals for disease control and this was mostly for seed treatment.
9. Weed control is not seen by the farmers as a great problem. Chemical weed killers are used by very few but most farmers do hill and cultivate by hand.

10. Grains are stored for home use in tanks (corn and sorghum) and/or sacks (beans). Beans are sold more often than corn or sorghum and the sale is to truckers who come into the neighborhood. Price information is obtained from neighbors or by inquiring in town. The three basic grains are also purchased during the year by more than half of the farmers.
11. Technical assistance was reported by one-third of the farmers but the agency could not usually be identified. There was wide agreement that future help was desired and requested before the planting season begins.
12. Recent changes in planting methods were reported by one-third of the farmers and they felt that these changes had helped to increase yields and income.
13. One-third of the farmers also do outside work to help supplement their income. They leave the community sometime between November and February (most in January) and most often go to the southern coast to work.

All four of the sub-areas were chosen because they were as much alike as possible in all of the characteristics mentioned above. All available data was examined as well as visits to the area to observe and talk with local people. The baseline survey confirms that the sub-areas were well chosen in their similarity. Nonetheless, there are some differences between the sub-areas that must be acknowledged. The outstanding variations of each sub-area are summarized in the following statements.

1. The farmers in Quezada A reported a higher proportion of land ownership than the other sub-areas. Although not greatly different from the other sub-areas, larger farm size, greater area planted to corn, greater area planted to rice, and more use of mules were reported by these farmers.
2. The farmers in Quezada B reported lower corn yields than the other sub-areas and lower application rates of fertilizer on corn and generally lower levels of use. This sub-area reported fewer visits by agricultural technicians although their desire for such visits is greater than the others. More farmers from Quezada B work away in January than the other sub-areas.
3. The farmers and farms in Quezada C, as compared to the other sub-areas, are outstanding in many ways reporting high in land preparation methods, in the use of fertilizer, in the use of insecticides, in the amount of technical help available, in recent agricultural method changes and in resulting yields and income from changes. More tobacco is planted although rice is much less common.
4. Yupi was chosen as a control area after considering a number of other possible locations. Because of the experimental design it was necessary to isolate the control area from the three treatment areas for radio broadcasting. In doing this, a number of variations in both natural and cultural environment were introduced. Some of these are reflected in the data summarized in this report. The farmers and farms in Yupi as compared to the other sub-areas are smaller in size, the corn plantings are smaller, land is not plowed as often before planting nor are oxen used as much as in

the other sub-areas. Corn is hilled considerably less often, and insecticide use is not as common. There is less participation in the market, both in selling grains as well as buying for consumption. Seed corn, in particular, is more often of the degenerated hybrid variety that comes from the previous crop. In contrast to this, fertilizer use is common (although of partial formula) and chemical weed killers are used more often.

All of the material in this paper and in Working Paper No. 1 are of descriptive nature and will serve to give a profile of the subsistence farmers of Jutiapa at the time the Basic Village Education Project was initiated. They will be used as a point of comparison as the project continues and as other experimental areas are incorporated. The baseline data from these reports will serve as the standard for measurement of change in agricultural practices throughout the project and will be subjected to intensive statistical analysis.

## WORKING PAPER NO. 3

EVALUATION OF CHANGES IN KNOWLEDGE, ATTITUDE AND PRACTICES  
AMONG SUBSISTENCE FARMERS IN THE DEPARTMENT OF JUTIAPA, GUATEMALA:  
A TIME SAMPLING METHODOLOGY

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TAMPA, FLORIDA

MAY, 1975

An Affirmative Action Equal Opportunity Institution

TABLE III

## BASIC VILLAGE EDUCATION: GUATEMALA

## REPORTED KNOWLEDGE, ATTITUDE AND USE OF RECOMMENDED AGRICULTURAL PRACTICES

| <u>All Practices</u>         | <u>Communication Treatment</u> |              |                        |                                     |       | <u>Total All Sub-Areas**</u> |
|------------------------------|--------------------------------|--------------|------------------------|-------------------------------------|-------|------------------------------|
|                              | <u>Control</u>                 | <u>Radio</u> | <u>Radio + Monitor</u> | <u>Radio + Monitor + Agronomist</u> |       |                              |
| Use 1973 No.                 | 148                            | 254          | 200                    | 167                                 | 769   |                              |
| %                            | 16.4                           | 28.2         | 22.2                   | 18.6                                | 21.4  |                              |
| New knowledge: 1974 No.      | 120                            | 220          | 244                    | 303                                 | 887   |                              |
| %                            | 13.3                           | 24.4         | 27.1                   | 33.7                                | 24.6  |                              |
| Favorable attitude: 1974 No. | 274                            | 328          | 365                    | 421                                 | 1388  |                              |
| %                            | 30.4                           | 36.4         | 40.6                   | 46.8                                | 38.6  |                              |
| Use 1974 No.                 | 110                            | 212          | 198                    | 184                                 | 704   |                              |
| %                            | 12.2                           | 23.6         | 22.0                   | 20.4                                | 19.6  |                              |
| Change in use 1973-74 No.    | -38                            | -42          | -2                     | 17                                  | -65   |                              |
| *** %                        | - 4.2                          | - 4.7        | -0.2                   | 1.9                                 | - 1.8 |                              |

\*Total possible responses = 900.

\*\*Total possible responses = 3600.

\*\*\* Negative change due to fertilizer shortage and adverse growing conditions. See following page for further discussion.

Source: 1974 Monthly Time Samples III through VII.

From the preliminary analysis of the data it would appear that mass media (radio) can be used to effect change in knowledge and attitudes among a traditional population such as the subsistence farmers in southeastern Guatemala. (Both hypotheses comparing radio to no radio at the level of knowledge and attitudes were confirmed.) It also suggests that the possibilities of knowledge, attitude and practice change increase as group meetings and personal visits of technicians are added to the message system. (Two of the four hypotheses were confirmed. The addition of the monitor alone to radio does not make a significant difference but it is found that the results from the combined interpersonal treatment of monitor and agronomist with the mass treatment of radio is significantly greater than with radio alone. This is true at the levels of knowledge, attitudes and practices.) The possibilities of changing practices as compared to knowledge and attitudes, at least within the short period of one year by the use of radio or radio combined treatments, is not as clearly substantiated by the data from the time sample surveys.

One of the greatest problems in using a single year for the measurement of change in agricultural practices is that many things in the natural and cultural environment change from year to year making it impossible to use a desired practice a given year although it is generally adopted in the long run. The use of fertilizers in 1974 is just such a case. The international oil crises had a direct effect on the availability and price of fertilizers. Even when available, the price in 1974 was at least three times that of 1973. One of the sub-areas (the one that was randomly chosen for Radio treatment alone) already had used many of the recommended farm practices related to chemical fertilizer prior to the initiation of the Basic Village Education program so that the impact of the fertilizer shortage gave a negative effect. Some indication of the impact of fertilizer shortage is available from the data presented here but only long term measurement of change will give a more accurate assessment. For example, 40% of the farmers interviewed said they had used recommended types of fertilizer at seeding time in 1973 but only 23% used it in 1974 in spite of increased knowledge and favorable attitudes. The responses on non-fertilizer items were in contrast to the above example. In response to the question on the order of weeding and hilling corn, 33% of the farmers interviewed said they had used the recommended practice in 1973 and this increased to 41% in 1974. It should be mentioned also that 1973 was one of the best crop years that has been experienced in the study area during the last decade.

No attempt has been made in this summary to analyze the message content or methods of presentation in the different treatment areas. A further analysis by practice could give an indication of which ones had the greatest impact.

This summary is only one of a series that will be conducted as part of the Basic Village Education Project so that the present findings, which are tentative in nature, can be further confirmed or amplified in the future. The actual measurement of crop yields will be an important part of the project.

The hypotheses examined are illustrative of the potential of time sampling for ongoing evaluation of a field project in Basic Village Education. The reader may wish to pursue other areas in the summary codebook tables that follow.

BASIC VILLAGE EDUCATION

## COMPARATIVE INFORMATION ON EXPERIMENTAL AND CONTROL AREAS

## IN ORIENTE AND OCCIDENTE:

## SELECTED ITEMS FROM 1974 BASELINE/YEAR-END SURVEY

Twenty-four items have been selected for comparison of the major areas and sub-areas to be included in the 1975 program of Basic Village Education. These items include:

1. Occupation
2. Land tenure arrangement
3. Radio use
4. Sanitary facilities
5. Family size
6. Educational characteristics
7. Selected agricultural practices
8. Crop yields

There is considerable variation between major areas in some of these characteristics as can be observed in Table I. The differences between sub-areas within each of the major areas can be observed in Tables II-V.

## COMPARATIVE INFORMATION

## SELECTED ITEMS FROM 1974 SURVEY

Major Area Comparisons

TABLE I

| Area/s  | Oriente |       | Ipala | Occidente |        |
|---|---------|-------|-------|-----------|--------|
|   | Quezada | Yupi  |       | Momos     | Quiche |
| 13. Occupation: "Farmer" (%)  | 100.0   | 99.7  | 100.0 | 98.3      | 100.0  |
| 26. Use hybrid seed corn (%)  | 3.2     | 1.6   | 0.4   | 0.0       | 0.0    |
| 45. Average corn yield (growers only) (qq/mza)  | 11.0    | 10.45 | 9.92  | 19.0      | 15.82  |
| 46. Average bean yield (growers only) (qq/mza)  | 8.53    | 6.88  | 18.0  | 5.2       | 2.61   |
| 99. Use insecticides (%)  | 37.1    | 24.1  | 13.3  | 29.3      | 11.1   |
| 122. Use chemical fertilizer on corn at flowering time (% using more than 1 qq/mza)       | 10.5    | 5.4   | 1.2   | 14.6      | 9.2    |
| 125. Use chemical fertilizer on corn/beans at flowering time (% using more than 1 qq/mza) | 2.5     | 0.5   | 5.9   | 40.1      | 30.2   |
| 169. Use credit (%)   | 18.1    | 9.1   | 7.9   | 25.2      | 12.5   |
| 174. Visited by agronomist (%)  | 73.7    | 37.0  | 20.0  | 3.6       | 0.0    |
| 182. Own land (%)   | 80.5    | 69.6  | 52.5  | 99.3      | 99.5   |
| Average size of land owned (owners only) (mzs)  | 3.05    | 2.52  | 2.73  | 2.35      | 1.57   |
| 183. Rent land (%)  | 27.3    | 42.6  | 60.1  | 2.6       | 4.8    |
| Average size of rented land (renters only) (mzs)  | 1.93    | 1.87  | 2.14  | 0.0       | 0.8    |
| 184. Has communal land (%)  | 9.2     | 4.5   | 0.4   | 0.3       | 0.0    |
| Average size of communal land (communal operators only) (mzs)                             | 2.75    | 3.7   | 0.0   | 0.0       | 0.0    |
| 185. Has sharecropped land (%)  | 10.7    | 19.2  | 0.0   | 0.9       | 0.5    |
| Average size of sharecropped land (Sharecroppers only) (mzs)                              | 2.25    | 2.19  | 0.0   | 0.0       | 2.0    |

\*The original computer print-out did not include all of the cases. All 373 cases have been included in this summary. (Yupi)

TABLE I, continued

| Area/s  | Quezada | <u>Oriente</u> |  | Ipala | <u>Occidente</u> |        |
|---|---------|----------------|--|-------|------------------|--------|
|   |         | Yupi           |  |       | Monos            | Quiche |
| 195. Spends time working away (%)                 | 46.1    | 42.6           |  | 28.3  | 77.3             | 50.0   |
| 210. Listen to radio daily (%)                    | 91.8    | 83.1           |  | 76.3  | 53.5             | 53.9   |
| 251. Has toilet facilities (%)                    | 7.7     | 0.8            |  | 5.1   | 9.5              | 0.5    |
| 254. Average number of children                   | 5.75    | 3.97           |  | 4.63  | 4.27             | 3.56   |
| 255. Illiterate (%)                               | 54.4    | 63.8           |  | 59.6  | 66.3             | 82.7   |
| 256. Attended school (%)                          | 37.4    | 29.1           |  | 30.1  | 27.5             | 15.9   |
| Average years of school<br>attendance (attenders) | 2.51    | 2.28           |  | 2.52  | 2.33             | 1.79   |

BASIC VILLAGE EDUCATION: GUATEMALA

COMPARATIVE INFORMATION

SELECTED ITEMS FROM 1974 SURVEY

Oriente: Quezada

TABLE II

| Area/s  | QR    | QRM   | QRMA  | Yupi  | O. Total |
|---|-------|-------|-------|-------|----------|
| 13. Occupation: "Farmer" (%)  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0    |
| 26. Use hybrid seed corn (%)  | 7.2   | 1.8   | 3.3   | 0.8   | 3.2      |
| 45. Average corn yield (growers only) (qq/mza)  | 12.4  | 10.9  | 9.8   | 10.8  | 11.0     |
| 46. Average bean yield (growers only) (qq/mza)  | 9.27  | 9.88  | 8.57  | 6.65  | 8.53     |
| 99. Use insecticides (%)  | 46.4  | 47.7  | 30.3  | 26.4  | 37.19    |
| 122. Use chemical fertilizer on corn at flowering time (% using more than 1 qq/mza)       | 20.6  | 10.1  | 5.1   | 7.1   | 10.5     |
| 125. Use chemical fertilizer on corn/beans at flowering time (% using more than 1 qq/mza) | 8.1   | 0.9   | 0.8   | 0.8   | 2.5      |
| 169. Use credit (%)   | 28.6  | 17.3  | 17.5  | 10.2  | 18.1     |
| 174. Visited by agronomist (%)  | 70.5  | 68.8  | 86.5  | 69.0  | 73.7     |
| 182. Own land (%)   | 80.4  | 85.2  | 75.7  | 80.7  | 80.5     |
| Average size of land owned (owners only) (mzs)  | 3.26  | 3.58  | 3.15  | 2.29  | 3.05     |
| 183. Rent land (%)  | 14.3  | 11.9  | 39.5  | 40.3  | 27.3     |
| Average size of rented land (renters only) (mzs)  | 1.81  | 2.08  | 2.20  | 1.68  | 1.93     |
| 184. Has communal land (%)  | 22.4  | 16.5  | 0.0   | 0.0   | 9.2      |
| Average size of communal land (communal operators only) (mzs)                             | 2.96  | 2.47  | 0.0   | 0.0   | 2.75     |
| 185. Has sharecropped land (%)  | 8.1   | 10.1  | 5.0   | 18.6  | 10.7     |
| Average size of sharecropped land (Sharecroppers only) (mzs)                              | 2.88  | 2.27  | 2.33  | 1.98  | 2.25     |

TABLE II, continued

| Area/s   | OR   | ORM  | QRMA | Yupi | Q.Total |
|--|------|------|------|------|---------|
| 195. Spends time working away (%)              | 50.9 | 38.6 | 40.4 | 44.3 | 46.18   |
| 210. Listen to radio daily (%)                 | 94.6 | 97.2 | 96.6 | 80.7 | 91.8    |
| 251. Has toilet facilities (%)                 | 1.8  | 28.4 | 2.5  | 0.0  | 7.7     |
| 254. Average number of children                | --   | --   | --   | --   | 5.75    |
| 255. Illiterate (%)                            | 63.4 | 49.5 | 54.6 | 50.4 | 54.4    |
| 256. Attended school (%)                       | 35.7 | 37.6 | 37.8 | 38.9 | 37.4    |
| Average years of school attendance (attenders) | 2.25 | 2.76 | 2.68 | 2.37 | 2.51    |

BASIC VILLAGE EDUCATION: GUATEMALA

Evaluation Report 42  
 April 30, 1975  
 (Revised supplement  
 for Evaluation Report  
 of April 16, 1975)\*

COMPARATIVE INFORMATION

SELECTED ITEMS FROM 1974 SURVEY

Oriente: Yupi

TABLE III

| Area/s  | Y1   | Y2    | Y3    | YTotal |
|---|------|-------|-------|--------|
| 13. Occupation: "Farmer" (%)  | 99.1 | 100.0 | 100.0 | 99.7   |
| 26. Use hybrid seed corn (%)  | 0.9  | 3.1   | 0.8   | 1.6    |
| 45. Average corn yield (growers only) (qq/mza)  | 8.51 | 12.69 | 9.90  | 10.45  |
| 46. Average bean yield (growers only) (qq/mza)  | 7.32 | 6.64  | 6.76  | 6.88   |
| 99. Use insecticides (%)  | 20.2 | 31.0  | 20.6  | 24.1   |
| 122. Use chemical fertilizer on corn at flowering time (% using more than 1 qq/mza)       | 2.7  | 9.1   | 4.0   | 5.4    |
| 125. Use chemical fertilizer on corn/beans at flowering time (% using more than 1 qq/mza) | 0.0  | 0.8   | 0.8   | 0.5    |
| 169. Use credit (%)   | 8.9  | 9.1   | 9.6   | 9.1    |
| 174. Visited by agronomist (%)  | 16.7 | 30.1  | 62.7  | 37.0   |
| 182. Own land (%)   | 57.1 | 73.0  | 77.8  | 69.6   |
| Average size of land owned (owners only) (mzs)  | 2.57 | 2.56  | 2.44  | 2.52   |
| 183. Rent land (%)  | 61.5 | 21.9  | 47.7  | 42.6   |
| Average size of rented land (renters only) (mzs)  | 1.95 | 1.84  | 1.80  | 1.87   |
| 184. Has communal land (%)  | 4.5  | 0.0   | 0.0   | 4.5    |
| Average size of communal land (communal operators only) (mzs)                             | 3.7  | 0.0   | 0.0   | 3.7    |
| 185. Has sharecropped land (%)  | 3.6  | 38.4  | 13.5  | 19.2   |
| Average size of sharecropped land (Sharecroppers only) (mzs)                              | 3.0  | 2.15  | 2.11  | 2.19   |

\*The original computer print-out did not include all of the cases. All 373 cases have been included in this summary.

TABLE III, continued

| Area/s  | Y1   | Y2   | Y3   | YTotal |
|---|------|------|------|--------|
| 195. Spends time working away (%)                 | 33.3 | 44.4 | 49.3 | 42.6   |
| 210. Listen to radio daily (%)                    | 81.6 | 82.7 | 85.0 | 83.1   |
| 251. Has toilet facilities (%)                    | 0.9  | 0.80 | 0.80 | 0.80   |
| 254. Average number of children                   | 3.13 | 4.36 | 4.32 | 3.97   |
| 255. Illiterate (%)                               | 83.3 | 54.9 | 55.6 | 63.8   |
| 256. Attended school (%)                          | 14.2 | 33.2 | 38.9 | 29.1   |
| Average years of school<br>attendance (attenders) | 2.33 | 2.39 | 2.31 | 2.28   |

## BASIC VILLAGE EDUCATION: GUATEMALA

## COMPARATIVE INFORMATION

## SELECTED ITEMS FROM 1974 SURVEY

Oriente: IpalaTABLE IV

| Area/s  | I1    | I2    | ITotal |
|---|-------|-------|--------|
| 13. Occupation: "Farmer" (%)  | 100.0 | 100.0 | 100.0  |
| 26. Use hybrid seed corn (%)  | 0.7   | 0.0   | 0.4    |
| 45. Average corn yield (growers only) (qq/mza)  | 9.66  | 10.27 | 9.92   |
| 46. Average bean yield (growers only) (qq/mza)  | 18.3  | 14.2  | 18.0   |
| 99. Use insecticides (%)  | 11.6  | 15.9  | 13.3   |
| 122. Use chemical fertilizer on corn at flowering time (% using more than 1 qq/mza)       | 0.0   | 3.0   | 1.2    |
| 125. Use chemical fertilizer on corn/beans at flowering time (% using more than 1 qq/mza) | 0.7   | 18.0  | 5.9    |
| 169. Use credit (%)   | 7.2   | 9.0   | 7.9    |
| 174. Visited by agronomist (%)  | 23.7  | 14.9  | 20.0   |
| 182. Own land (%)   | 55.4  | 48.5  | 52.5   |
| Average size of land owned (owners only) (mzs)  | 4.05  | 2.11  | 2.73   |
| 183. Rent land (%)  | 53.2  | 69.3  | 60.1   |
| Average size of rented land (renters only) (mzs)  | 2.12  | 2.16  | 2.14   |
| 184. Has communal land (%)  | 0.0   | 1.0   | 0.4    |
| Average size of communal land (communal operators only) (mzs)                             | 0.0   | 0.0   | 0.0    |
| 185. Has sharecropped land (%)  | 0.0   | 0.0   | 0.0    |
| Average size of sharecropped land (Sharecroppers only) (mzs)                              | 0.0   | 0.0   | 0.0    |

TABLE IV, continued

| Area/s  | I1   | I2   | ITotal |
|---|------|------|--------|
| 195. Spends time working away (%)                 | 37.4 | 15.9 | 28.3   |
| 210. Listen to radio daily (%)                    | 79.1 | 72.3 | 76.3   |
| 251. Has toilet facilities (%)                    | 3.6  | 7.0  | 5.1    |
| 254. Average number of children                   | --   | --   | 4.63   |
| 255. Illiterate (%)                               | 59.7 | 59.4 | 59.6   |
| 256. Attended school (%)                          | 31.6 | 27.8 | 30.1   |
| Average years of school<br>attendance (attenders) | 2.22 | 3.00 | 2.52   |

## BASIC VILLAGE EDUCATION: GUATEMALA

## COMPARATIVE INFORMATION

## SELECTED ITEMS FROM 1974 SURVEY

Occidente: MomosTABLE V

| Area/s  | Oc1  | Oc2  | Oc3   | OcTotal |
|---|------|------|-------|---------|
| 13. Occupation: "Farmer" (%)  | 99.3 | 97.5 | 97.7  | 98.3    |
| 26. Use hybrid seed corn (%)  | 0.0  | 0.0  | 0.0   | 0.0     |
| 45. Average corn yield (growers only) (qq/mza)  | 18.5 | 19.3 | 19.2  | 19.0    |
| 46. Average bean yield (growers only) (qq/mza)  | 6.9  | 5.5  | 3.4   | 5.2     |
| 99. Use insecticides (%)  | 36.3 | 40.6 | 11.3  | 29.3    |
| 122. Use chemical fertilizer on corn at flowering time (% using more than 1 qq/mza)       | 28.9 | 7.6  | 4.7   | 14.6    |
| 125. Use chemical fertilizer on corn/beans at flowering time (% using more than 1 qq/mza) | 41.7 | 73.7 | 8.3   | 40.1    |
| 169. Use credit (%)   | 28.9 | 25.4 | 20.4  | 25.2    |
| 174. Visited by agronomist (%)  | 1.4  | 0.0  | 9.0   | 3.6     |
| 182. Own land (%)   | 98.6 | 98.2 | 100.0 | 99.3    |
| Average size of land owned (owners only) (mzs)  | 1.53 | 3.85 | 1.94  | 2.35    |
| 183. Rent land (%)  | 3.4  | 3.3  | 0.8   | 2.6     |
| Average size of rented land (renters only) (mzs)  | 0.0  | 0.0  | 0.0   | 0.0     |
| 184. Has communal land (%)  | 0.0  | 0.8  | 0.0   | 0.3     |
| Average size of communal land (communal operators only) (mzs)                             | 0.0  | 0.0  | 0.0   | 0.0     |
| 185. Has sharecropped land (%)  | 0.7  | 1.6  | 0.0   | 0.9     |
| Average size of sharecropped land (Sharecroppers only) (mzs)                              | 0.0  | 0.0  | 0.0   | 0.0     |

TABLE V, continued

| Area/s  | Oc1  | Oc2  | Oc3  | OcTotal |
|---|------|------|------|---------|
| 195. Spends time working away (%)                 | 79.9 | 83.9 | 68.4 | 77.3    |
| 210. Listen to radio daily (%)                    | 54.3 | 59.3 | 47.3 | 53.5    |
| 251. Has toilet facilities (%)                    | 0.7  | 3.4  | 24.8 | 9.5     |
| 254. Average number of children                   | --   | --   | --   | 4.27    |
| 255. Illiterate (%)                               | 73.2 | 80.5 | 45.9 | 66.3    |
| 256. Attended school (%)                          | 12.1 | 17.8 | 52.7 | 27.5    |
| Average years of school<br>attendance (attenders) | 1.36 | 2.80 | 2.38 | 2.33    |

## BASIC VILLAGE EDUCATION: GUATEMALA

## COMPARATIVE INFORMATION

## SELECTED ITEMS FROM 1974 SURVEY

Occidente: QuicheTABLE VI

| Area/s  | 4     | 5     | TOTAL |
|---|-------|-------|-------|
| 13. Occupation: "Farmer" (%)  | 100.0 | 100.0 | 100.0 |
| 26. Use hybrid seed corn (%)  | 0.0   | 0.0   | 0.0   |
| 45. Average corn yield (growers only) (qq/mza)  | 14.40 | 17.79 | 15.82 |
| 46. Average bean yield (growers only) (qq/mza)  | 2.59  | 2.50  | 2.61  |
| 99. Use insecticides (%)  | 9.1   | 13.8  | 11.1  |
| 122. Use chemical fertilizer on corn at flowering time (% using more than 1 qq/mza)       | 8.3   | 10.1  | 9.2   |
| 125. Use chemical fertilizer on corn/beans at flowering time (% using more than 1 qq/mza) | 23.1  | 40.2  | 30.2  |
| 169. Use credit (%)   | 9.9   | 16.0  | 12.5  |
| 174. Visited by agronomist (%)  | 0.0   | 0.0   | 0.0   |
| 182. Own land (%)   | 100.1 | 98.8  | 99.5  |
| Average size of land owned (owners only) (mzs)  | 1.33  | 1.91  | 1.57  |
| 183. Rent land (%)  | 5.0   | 4.6   | 4.8   |
| Average size of rented land (renters only) (mzs)  | 0.5   | 1.25  | 0.8   |
| 184. Has communal land (%)  | 0.0   | 0.0   | 0.0   |
| Average size of communal land (communal operators only) (mzs)                             | 0.0   | 0.0   | 0.0   |
| 185. Has sharecropped land (%)  | 0.0   | 1.1   | 0.5   |
| Average size of sharecropped land (Sharecroppers only) (mzs)                              | 0.0   | 2.0   | 2.0   |

TABLE VI, continued

| Area/s  | 4    | 5    | TOTAL |
|---|------|------|-------|
| 195. Spends time working away (%)                 | 41.3 | 62.0 | 50.0  |
| 210. Listen to radio daily (%)                    | 57.9 | 48.2 | 53.9  |
| 251. Has toilet facilities (%)                    | 0.0  | 1.1  | 0.5   |
| 254. Average number of children                   | 3.55 | 3.56 | 3.56  |
| 255. Illiterate (%)                               | 85.1 | 79.3 | 82.7  |
| 256. Attended school (%)                          | 14.0 | 18.2 | 15.9  |
| Average years of school<br>attendance (attenders) | 2.06 | 1.50 | 1.79  |

## List of Major Areas, Treatment Areas, Villages, and Individuals Included In

1974 SurveyORIENTE

## Quezada R-

|             |           |
|-------------|-----------|
| Potrerillos | 19        |
| Jicaro      | 30        |
| Bordo Alto  | 17        |
| Jocote      | 30        |
| Rodco       | <u>16</u> |
| Total       | 112       |

## Quezada RM-

|                 |           |
|-----------------|-----------|
| Santa Gertrudis | 19        |
| Los Comunes     | 17        |
| La Brca         | 14        |
| Salitrillo      | 26        |
| Tule            | <u>33</u> |
| Total           | 109       |

## Quezada RMA-

|               |           |
|---------------|-----------|
| Las Quebradas | 16        |
| Don Diego     | 19        |
| La Libertad   | 15        |
| San Fernando  | 35        |
| El Retiro     | <u>34</u> |
| Total         | 119       |

Quezada Total= 341

## Yupiltepeque R-

|              |           |
|--------------|-----------|
| Las Brisas   | 40        |
| El Calvario  | 40        |
| Pueblo Viejo | 23        |
| Aspitia      | <u>23</u> |
| Total        | 126       |

## Yupiltepeque RMA-

|               |           |
|---------------|-----------|
| Estanzuela    | 35        |
| La Ceibita    | 32        |
| Cerro Redondo | 36        |
| La Perla      | <u>30</u> |
| Total         | 133       |

## Yupiltepeque RM-

|          |           |
|----------|-----------|
| El Llano | 35        |
| Sillon   | 50        |
| Tetunte  | 16        |
| El Sauce | <u>13</u> |
| Total    | 114       |

Yupiltepeque Total= 373

## Ipala Control I

|             |           |
|-------------|-----------|
| La Coronada | 23        |
| La Granja   | 30        |
| Las Cruces  | 32        |
| El Jocote   | 31        |
| El Chaguite | <u>23</u> |
| Total       | 139       |

Ipala Control II M  
Cacahuatpeque 101

Ipala Total = 240

OCCIDENTE

Juntaca RMA -  
Paquix 17  
Xesaciac 20  
Xelenova 16  
Racana 34  
Sajcamlaj 23  
Patziquiche 7  
Total 117

Canquixaja RM -  
Canquixaja Centro 79  
Panca 33  
Nimsutuj 38  
Total 150

Tzanjon R -  
Pacomanchaj  
y/o Pachoquisis 24  
Chicho y/o Paquix 23  
Centro Tzanjon 30  
Paturubala  
y/o Xealás 29  
Chuiaj 27  
Total 133

Occidente Total = 400

Chichi Control I  
Xepocol 67  
Saquilla 54  
Total 121

Chichi Control II M  
Chipaca 87

Quiche Total = 208

TOTAL ALL AREAS = 1561

BASIC VILLAGE EDUCATION  
 ORIENTE EVALUATION TIME LINE

|                       | <u>Program Year</u> |             |             |
|-----------------------|---------------------|-------------|-------------|
|                       | <u>1974</u>         | <u>1975</u> | <u>1976</u> |
| <u>Quezada Area</u>   |                     |             |             |
| R                     | / (119) /           | / (112) /   | / (+110) /  |
| RM                    | / (118) /           | / (109) /   | / (+100) /  |
| RMA                   | / (133) /           | / (119) /   | / (+115) /  |
| Total Interviewed     | 370                 | 341         | (+)325      |
| <u>Yupi Area</u>      |                     |             |             |
| Control               | / (136) /           | ...../      | ...../      |
| <u>Yupi Area</u>      |                     |             |             |
| R                     | /...../             | / (126)* /  | / (+120) /  |
| RM                    | /...../             | / (114) /   | / (+110) /  |
| RMA                   | /...../             | / (133)** / | / (+130) /  |
| Total Interviewed     |                     | 373         | (+)360      |
| <u>Ipala Area</u>     |                     |             |             |
| I - Control           | /...../             | / (139) /   | /...../     |
| Monitor               | /...../             | /...../     | / (+130) /  |
| II - Monitor          | /...../             | / (101) /   | / (+95) /   |
| Total Interviewed     |                     | 240         | (+)225      |
| <u>Oriente Totals</u> |                     |             |             |
| Respondents           | 506                 | 953         | (+)910      |
| Interviews            | 1695                | 2553        | (+)3420     |

\*Includes 101 cases from Yupi 1974 (plus 25 new cases).

\*\*Includes 30 cases from Yupi 1974 (plus 128 new cases).

BASIC VILLAGE EDUCATION

POPULATION BREAKDOWN BY AREA, TREATMENT AND VILLAGE

ORIENTE: QUEZADA

| Program<br>Year | R           |           | RM            |           | RMA           |           |
|-----------------|-------------|-----------|---------------|-----------|---------------|-----------|
| 1974            | Potrerillos | 21        | Sta Gertrudis | 20        | Las Quebradas | 19        |
|                 | Jicaro      | 31        | Los Comunes   | 18        | Don Diego     | 22        |
|                 | Bordo Alto  | 20        | La Brea       | 18        | La Libertad   | 16        |
|                 | Jocote      | 30        | Salitrillo    | 28        | San Fernando  | 39        |
|                 | Rodeo       | <u>17</u> | El Tule       | <u>34</u> | El Retiro     | <u>37</u> |
|                 | Total       | 119       | Total         | 118       | Total         | 133       |
| 1975            | Potrerillos | 19        | Sta Gertrudis | 19        | Las Quebradas | 16        |
|                 | Jicaro      | 30        | Los Comunes   | 17        | Don Diego     | 19        |
|                 | Bordo Alto  | 17        | La Brea       | 14        | La Libertad   | 15        |
|                 | Jocote      | 30        | Salitrillo    | 26        | San Fernando  | 35        |
|                 | Rodeo       | <u>16</u> | El Tule       | <u>33</u> | El Retiro     | <u>34</u> |
|                 | Total       | 112       | Total         | 109       | Total         | 119       |
| 1976            | Potrerillos |           | Sta Gertrudis |           | Las Quebradas |           |
|                 | Jicaro      |           | Los Comunes   |           | Don Diego     |           |
|                 | Bordo Alto  |           | La Brea       |           | La Libertad   |           |
|                 | Jocote      |           | Salitrillo    |           | San Fernando  |           |
|                 | Rodeo       |           | El Tule       |           | El Retiro     |           |
|                 | Total       | +110      | Total         | +100      | Total         | +115      |



BASIC VILLAGE EDUCATION  
 POPULATION BREAKDOWN BY AREA, TREATMENT AND VILLAGE

ORIENTE: IPALA

Program  
 Year

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1974

|  | <u>I - Control</u>    |  | <u>II - M</u>            |
|--|-----------------------|--|--------------------------|
|  | La Coronada 23        |  | Cacahuatpeque <u>101</u> |
|  | La Granja 30          |  | Total 101                |
|  | Las Cruces 32         |  |                          |
|  | El Jocote 31          |  |                          |
|  | El Chaguite <u>23</u> |  |                          |
|  | Total 139             |  |                          |

1975

|  | <u>I - M</u> |  | <u>II - M</u> |
|--|--------------|--|---------------|
|  | La Coronada  |  | Cacahuatpeque |
|  | La Granja    |  | Total +95     |
|  | Las Cruces   |  |               |
|  | El Jocote    |  |               |
|  | El Chaguite  |  |               |
|  | Total +130   |  |               |

1976

BASIC VILLAGE EDUCATION  
 OCCIDENTE EVALUATION TIME LINE

|                         | <u>Program Year</u> |             |             |
|-------------------------|---------------------|-------------|-------------|
|                         | <u>1974</u>         | <u>1975</u> | <u>1976</u> |
| <u>Momos Area</u>       |                     |             |             |
| R                       | /...../             | (133)       | (+130)      |
| RM                      | /...../             | (150)       | (+145)      |
| RMA                     | /...../             | (117)       | (+115)      |
| Total Interviewed       |                     | 400         | (+)390      |
| <u>Quiche Area</u>      |                     |             |             |
| I - Control             | /...../             | (121)       | /...../     |
| Monitor                 | /...../             |             | (+115)      |
| II - Monitor            | /...../             | (87)        | (+ 85)      |
| Total Interviewed       |                     | 208         | (+)200      |
| <u>Occidente Totals</u> |                     |             |             |
| Respondents             | --                  | 608         | 590         |
| Interviews              | --                  | 1408        | 1980        |

BASIC VILLAGE EDUCATION  
 POPULATION BREAKDOWN BY AREA, TREATMENT AND VILLAGE

OCCIDENTE: MOMOS

| Program Year | R                    | RM                | RMA           |
|--------------|----------------------|-------------------|---------------|
| 1974         | --                   | --                | --            |
| 1975         | Pachomanchaj         | Canquixaja Centro | Paquis        |
|              | y/o Pachoquisis 24   | Panca             | Xesoclac 20   |
|              | Chicho y/o Paquix 23 | Nimjutuj          | Xelenawa 16   |
|              | Centro Tzanjon 30    | Total 150         | Patzaquiche 7 |
|              | Patrubala y/o        |                   | Racana 34     |
|              | Xealas 29            |                   | Sajeamlaj 23  |
|              | Chuaj 27             |                   | Total 117     |
|              | Total 133            |                   |               |
| 1976         | Pachomanchaj         | Canquixaja Centro | Sajeamlaj     |
|              | y/o Pachoquisis      | Panca             | Paquis        |
|              | Chicho y/o Paquix    | Nimjutuj          | Xesoclac      |
|              | Centro Tzanjon       | Total +145        | Xelenawa      |
|              | Patrubala y/o        |                   | Patzaquiche   |
|              | Xealas               |                   | Racana        |
|              | Chuaj                |                   | Total +115    |
|              | Total +130           |                   |               |

BASIC VILLAGE EDUCATION  
 POPULATION BREAKDOWN BY AREA, TREATMENT AND VILLAGE

OCCIDENTE: QUICHE

Program  
 Year

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1974

I - Control

II - M

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1975

Xepocol 67  
 Saquilla 54  
 Total 121

Chipaca 87  
 Total 87

I - M

II - M

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1976

Xepocol  
 Saquilla  
 Total +115

Chipaca  
 Total +85