

EVALUATION OF

THE ALLIANCE FOR THE COUNTRYSIDE
(ALIANZA PARA EL CAMPO)

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THE ALLIANCE FOR THE COUNTRYSIDE (ALIANZA PARA EL CAMPO)

OVERVIEW

This document summarizes the progress of program evaluation efforts of the Alliance for the countryside (Alianza para el Campo) initiative of the Ministry of Agriculture, Mexico.

This evaluation has two purposes: (a) to evaluate the programs financed by the Government of Mexico's treasury funds, and (b) to study in detail the program performance with respect to the impact in agricultural production vis-a-vis the socioeconomic development of the rural people. Its objective is to provide feedback to policy makers, national and state level program administrators, professional agriculturists, related stakeholders and those who participate in the process.

This evaluation covers 20 different programs in 32 federal states in Mexico that are supported by the Alliance for the countryside. Altogether, 354 programs under the Alliance were evaluated. An overarching goal of this evaluation was to assess the impact of the federalization of the programs in the areas of production agriculture, natural resources conservation and social organization development within the rural farm communities. Specifically, this evaluation focussed on assessing the extent to which the objectives of the Alliance for the Countryside have been achieved. This evaluation is limited to the programs supported by the Alliance during the 1998 fiscal year.

It is recognized that evaluation of 20 different national programs across the 32 federal states is a complex task. In order to address the diversity of programs and the varying contexts in which these programs are implemented, this evaluation followed a special design utilizing both qualitative and quantitative methodologies. The evaluation methodology was carefully designed to gather data for numerous indicators that capture various aspects of the programs following a uniform methodology.

This progress report begins with a brief description of the Alliance for the Countryside (Alianza para el Campo) and the programs it supports in all the federal states of Mexico. It is followed by a description of the objectives and the approach to this evaluation. The third section presents a summary of the methods followed in this evaluation. The final section provides an assessment of the progress to date, lessons learned and specific recommendations to improve the evaluation process in the future.

PROJECT BACKGROUND

Alianza para el Campo is the policy basis of the Federal Government of Mexico to promote agricultural and rural development. This program has been initiated with the combined efforts of the growers, Federal States, Federal Departments and other organizations involved in the rural and agricultural development in Mexico. The program has been in operation since 1996.

The Alliance for the Countryside is based on public policy intended to bring about structural changes to address the needs for agricultural development. It is designed to address the problems facing agricultural producers including low productivity and low level of technology adopted by the farmers. The program has identified several agricultural enterprises and associated technological changes that could bring about increased food production. Examples of these improved technologies include those that make better use of water and fertilizer, adoption of improved seeds, disease and pest control practices, improved genetic quality of crops and livestock, improved cattle stocks, better animal health and sanitation practices, and pasture development and related infrastructure development for increased production. One of the major challenges facing the Alliance is to provide technical support and services to assist farmers to adopt these yield-increasing supplies and services.

The objectives of the Alianza para el Campo as stated in the National Development Program (Plan Nacional de Desarrollo) are the following:

- To increase the growers income.
- To achieve an agricultural production growth rate higher than the population growth rate.
- To improve the balance of trade.
- To support the overall development of rural communities.

The Alliance for the Countryside has been in operation since 1996. Under this initiative, all States sign a technical agreement with the Federal Government each year, committing funds to support rural and agricultural development programs identified by the Alliance. It should be noted, however, that each State decides which programs of the Alliance it would like to invest in, based on its own needs and priorities. It is called the Alliance because the funds to support these programs come from a partnership of the Federal Government, States Governments and the Producers. The ultimate goal of this Alliance is to give power to the state government to make investments in areas of their needs and priorities.

Each state has established a State Agricultural Committee to oversee the management and operation of the Alliance for the Countryside programs. The committee members come from various state level organizations of the Ministry of Agriculture and related agencies. The funds of the Alliance are managed through a Trust that is managed by the State Agricultural Committee.

The Federal Government has established the procedures and guidelines for the management of

the trust fund. In 1998, approximately 93% of the trust funds were allocated for program subsidies, 4% for operation, and the rest, 3% for program evaluation.

The Alliance delivers its services through four generic programs: agricultural improvement, livestock improvement, rural development, and sanitation. Under each State Agricultural Committee, there is one sub-committee to represent these four generic program areas. An individual farmer or a group of agricultural producers may apply for the funds by filing an application to the State Agricultural Committee. An appropriate sub-committee reviews the applications and the recommendations are forwarded to the State Agricultural Committee who makes the final funding decision. The funding is provided on a demand-driven basis and on a first-come first-serve basis.

In 1998 the total state and federal investment for these programs was US\$300 million of which over two-thirds of the funding came from the Federal Government. Except for the rural development program, approximately US\$200 million was allocated to the agriculture sector (Subsecretaría de Agricultura y Ganadería). This evaluation focuses on the accomplishments and impacts of this investment within the agriculture sector.

SCOPE OF THIS EVALUATION

This Evaluation covers the twenty different programs of the Alianza para el Campo that the Subsecretaría de Agricultura y Ganadería was responsible for in its operation. A brief description of the programs supported under this Alliance is as follows:

Fertil-Irrigation: The program provides subsidy to develop farm infrastructures like drip-irrigation and fertilizer application mechanisms.

Mechanization: it supports the purchase and/or repair of farm machinery and minimum tillage equipment.

Kilo per Kilo: It subsidizes the price of improved seed of major crops like corn, bean and wheat. For example, cost of one Kilogram of improved wheat seed would be same as the market price for wheat grain.

Soybean: Program would subsidize farmers for buying transgenic seeds, apply integrated pest management practices or pay for technical assistance services.

Cotton: Program would subsidize farmers for buying transgenic seeds, apply integrated pest management practices or pay for technical assistance services.

Oil Palm: Program would subsidize farmers for buying improved plants or pay for technical assistance services.

Coconut Palm: It would subsidize farmers for buying disease resistant plants mainly for replacement stocks.

Citrus: The program would subsidize farmers for buying disease resistant plant stocks mainly for replacement stocks.

Ornamental Horticulture: The program subsidizes the establishment and improvement of nursery and greenhouse facilities for commercial production of ornamental plants.

Saline Soil Recovery: It subsidizes the cost of irrigation/drainage and/or the application of Gypsum salt to recover saline soils for agricultural production purposes.

Pump Irrigation: This program provides subsidy to buy new irrigation pumps, fix/repair existing irrigation pumps, and/or such costs associated with channel construction and electrical use.

Pasture Land Development: Farmers would get subsidy for the establishment and/or development of pastures. Examples of program support include purchase of improved grass seeds/plant materials, establish electric fencing or establishment of rotational grazing plots.

Better Livestock: Program provides subsidy to buy national quality livestock (bulls, rams, goats)

or boars) for better production.

Animal Genetic Improvement: It subsidizes farmers for their import of breeding stocks, semen or related artificial insemination technology for herd improvement.

Dairy Promotion: The program is designed to serve farmers to improve performance of their dairy farms. The subsidy could support the purchase of special equipment like chilling tanks, herd improvement stocks and related technologies.

Integrated Livestock Development: The program pays farmers to cover technical assistance costs associated with the development of integrated livestock development projects.

Apiculture: Program subsidizes the cost associated with the development of honey production infrastructures. Producers could get subsidy for the purchase of honeybee stocks, beehives and honey processing equipment.

Technology Transfer: The program funds projects at agricultural research centers, agricultural colleges and universities to address local farmers' problems and find solutions to these problems. In most cases, the program provides subsidies for agricultural researchers to conduct applied research projects based on the felt needs of the farmers. It also supports research institutions to transfer the new knowledge/technology generated by their research programs through field days, demonstration plots, short courses, farm meetings, etc.

Animal Health: This program supports sanitary campaigns to diagnose and control animal diseases, disease monitoring and vaccination services.

Vegetable Protection: The program supports the sanitary campaigns to diagnose and control vegetable diseases and pests, disease and pest monitoring services.

In FY 1998, all 32 Federal States of Mexico funded a total of 369 projects (124 agricultural development, 150 livestock development, 31 technology transfer, 32 animal health, 32 vegetable protection) under the Alliance for the Countryside program. Table 1 shows the distribution of projects funded under various programs by the State Agricultural Committees. Out of the 369 projects, nine States had already initiated the evaluation of 17 projects (7 agricultural development and 10 livestock development projects) before the SAGAR-FAO project was commissioned in June 1999. Although the evaluators of these projects have followed somewhat different methodology, they are currently working to provide data to match the evaluative data requirement proposed by this project. Of the remaining 352 projects, some State Evaluation Sub-Committees have decided not to undertake the evaluation of 17 projects because these projects were very small and it was determined that it was not worth investing funds to the evaluation of such minor projects. Therefore, the scope of this study is limited to the 352 project evaluations in 32 States of Mexico.

GOALS AND OBJECTIVES OF THE EVALUATION

The overarching goal of this evaluation was to determine the performance of each program and the extent to which these programs achieved their objectives. This evaluation was conducted to assess the impact of various programs supported by the alliance on the people, economy and the environment. The information generated by this evaluation will be available for the general public to judge the worth or value of each program of the *Alliance*.

In addition, the evaluation will help to measure the efficacy of the national programs at the State level. The information it generates will be valuable to policy makers and program managers at the national and state level. It should provide corrective measures and/or actions to improve future program offerings. To put it simply, evaluation results should be useful to program functionaries. For the purpose of this study, evaluation is defined as the systematic collection of information about the activities, characteristics, and outcomes of programs to make judgements about the value of the program. Its goal is to improve program effectiveness, and/or inform decisions about future programming (Patton 1997).

The specific objectives of this evaluation include the following:

1. To determine the extent to which the goals and objectives of the programs have been accomplished.
2. To confirm the needs of participating farmers.
3. To document impacts of the programs on individual farmers and the communities where they live and manage their enterprises.
4. To identify program aspects that need changes or improvement.
5. To find ways to enhance beneficiary participation in the program.

Why External Evaluation?

The Alliance for the Countryside is one of the major development strategies of the Government of Mexico. The Government has committed significant resources to support this Alliance. In order to guarantee the objectivity of evaluation and to keep it out of the influence of immediate interest groups, the Government of Mexico established a special structure to coordinate and supervise this evaluation outside the Secretary of Agriculture, under the direction of the Food and Agriculture Organization (FAO) of the United Nations. FAO was interested to assist in the development of an evaluation model that could be replicated in other Latin American countries. Figure 1 shows the institutional arrangements developed for this evaluation.

As shown in Figure 1, the evaluation structure for the Alliance for the Countryside consists of different entities at the federal and state levels, and there is a strong private sector involvement in the process. An ad hoc institutional arrangement was developed to implement various evaluation studies in each State. The roles and functions of various functionaries is described as follows:

Evaluation and Follow-up Committee

The apex of the organization is an Evaluation and Follow-up Committee chaired by the Undersecretary of Agriculture and Livestock, which provides overall direction for evaluation. The principals of the General Directions of Agriculture, Livestock Production, Animal Health, Vegetable Protection, the National Institute of Agricultural, Livestock and Forest Research and the FIRCO serve as committee members. Under this committee are the heads of Normative Units (General Directions) that provide needed support to an independent Evaluation Unit established under the FAO of the United Nations.

The Evaluation and Follow-up Committee looks at program evaluation from a national perspective. Coordination of the evaluation is provided by the Undersecretary of Agriculture and Livestock Production, the General Directors in charge of program implementation, the General Coordination of Secretary of Agriculture Delegates in each State, the National Institute of Agricultural, Livestock and Forest Research, and the FIRCO.

The Evaluation and Follow-up Committee has the following functions:

- To establish general guidelines for evaluation studies and to acknowledge the receipt of final reports of evaluation.
- To provide funding for evaluation and oversee budgets devoted to evaluation.
- To solve, within its attributions, the problems that may arise during the course of evaluation.

The Committee will facilitate the coordination of all participating agencies in order to ensure the integrity, reliability and use of evaluations results.

Regulatory Entities

The regulatory entities are the normative agencies at the national level such as the General Directions of Agriculture, Livestock Production, and Animal Health and Vegetable Protection. These entities will take responsibility to follow-up the evaluations of their respective programs. They provide input in the design and implementation of evaluative studies. In addition, they participate in the selection of consultant firms to conduct the evaluation studies.

Central Support Unit

An external evaluation unit is established at the national level. This unit serves as the Central Support Unit for program evaluation. This entity operates within the framework of FAO, an international organization with technical and moral qualifications that ensures the rigor and objectivity of evaluation studies. The unit provides the overall technical support and methodological guidelines to both the national and local evaluation consulting firms. It will also prepare a synthesis report of all programs at the national level. The unit is staffed with international and national level evaluation consultants.

National Support Units

Three national private consulting firms are hired to serve as the National Support Units. These consulting firms assist in the monitoring and supervision of program evaluations conducted by

the Local Consulting Firms. These firms include Estudios en Economía Y Valuación (ESEC) to monitor and supervise the evaluation of two programs related to animal health and vegetable protection; Colegio de Postgraduados (CP) to monitor and supervise the evaluation of three programs related to technology transfer, apiculture and integrated livestock development; and PROINFA to supervise and monitor 13 programs related to agriculture including livestock production. These Consulting Firms are expected to visit the Local Consulting Firms at least twice during the evaluation project, provide technical assistance as needed to ensure the timely completion of evaluation studies, review the evaluation reports prepared by the Local Consulting Firms and provide feedback on the report, and maintain close communication with the Central Supporting Entity for timely completion of evaluation studies.

State Evaluation Sub-Committee

A State Evaluation Sub-committee is established in each state. Its membership consists of representatives of the State Government, a representative of the Secretary of Agriculture in the State, a producer representative, and two professionals or faculty members from local universities. This sub-committee reviews applications from the local evaluation consulting firms and make final selection of program evaluators.

Local Consulting Firms

A total of 71 Consulting Firms were selected and hired by State Evaluation Sub-Committees to conduct the evaluation of 352 projects. About one-third of these Consulting Firms (i.e., 22 Firms) are engaged in the evaluation of a single project, whereas eight Firms are involved in conducting half (50%) of the evaluations. It should be noted that 27 State Evaluation Sub-Committees have selected more than one Consulting Firm to conduct project evaluations.

The responsibilities and functions of the Local Consultant Firms are as follows:

1. Conduct project evaluation as per the guidelines prescribed by the State Evaluation Sub-Committee, and following the Methodological Guide and Reporting Format prescribed by the Central Support Unit under FAO.
2. Incorporate observations and recommendations submitted by the State level supporting entities in the draft and final reports.
3. Submit all qualitative and quantitative databases for the program evaluated.
4. Participate in the program evaluation training workshops and follow-up meetings to ensure uniformity in methodology.

Budget for Evaluation

Financial support for evaluation comes from the general budget of the Alliance for the Countryside in each State. Approximately, 3% of the total amount invested in each program is budgeted for evaluation. It was estimated that about US\$ 6 millions would be available for the Alliance to conduct the FY 1998 evaluation.

METHODOLOGY

Various authors have defined monitoring and evaluation using different terms. Horton, Peterson and Ballantyne (1993) defined monitoring and evaluation as follows:

“Monitoring (from the Latin *monere*: to warn) is observing or checking on activities and on their content, results, and impact. Its goals are to ensure that implementation is proceeding according to plan; to provide record of input use, activities and results; and to warn of deviations from initial goals and expected outcomes.”

“Evaluation is judging, appraising, or determining worth, value, or quality of proposed, on-going, or completed program activities, generally in terms of its relevance, effectiveness, efficiency and impact. Relevance refers to the appropriateness and importance of goals and objectives in relation to assessed needs. Effectiveness refers to the degree to which goals have been achieved. Efficiency refers to the cost-effectiveness of activities. And impact refers to the broad, long-term effects of program being evaluated.”

Whereas monitoring tracks whether progress is according to plan, evaluation analyzes issues of performance, quality, relevance, effectiveness and efficiency. According to Rossi and Freeman (1985), evaluations are undertaken to (1) judge the worth of on-going programs and estimate the usefulness of attempts to improve them; (2) assess the utility of innovative programs and initiatives; (3) increase the effectiveness of program management and administration; and (4) meet various accountability needs.

In recent years, utilization-focused evaluation has become popular. Newcomer et al (1994) defined utilization focused as meaning that an evaluation is designed to answer specific questions raised by those in charge of a program so that information provided can affect decisions about the program's future. Patton (1997) described utilization focused evaluation as “evaluation done for and with specific intended primary users for specific, intended uses.”

Evaluation Approaches

Different methods may be used to assess programs and projects, but in each case, the purpose is to provide policy makers and program managers who sponsor the programs with indications of its benefits or negative effects. Assessments done when a program is being planned (*ex ante* studies), or while it is still underway, can provide information to help decision makers identify the most promising directions for future activities. Assessments done after programs are completed (*ex post* studies) can extract lessons to improve the design of future programs. They also provide an indication of the magnitude of benefit (or problems) that have resulted from program activities (Peterson and Horton, 19993).

Since the Alliance for the countryside has been operating for the last five years, although programs are funded in a yearly basis, this evaluation will serve as a formative evaluation. A formative, process, or developmental evaluation provides information for program improvement, modification, and management. It asks descriptive questions like:

What are we supposed to be doing?

Are we doing right things?

How can we improve the program performance? What needs to be changed?

A summative, impact, or judgmental evaluation focuses on determining overall success, effectiveness, and accountability of a program. It helps in making major decisions about a program's continuation, expansion, reduction, and/or termination. A summative evaluation asks impact questions about what happened:

What were the outcomes of the program?

Who participated and how?

What are the impacts? What were the costs?

The need to evaluate the programs supported by the Alliance for the countryside is accountability. The Secretary of Agriculture seeks funds from the Secretary of Finance on an annual basis. In order to justify new funds, the Secretary of Agriculture needs to provide answers to question such as:

How have the resources of the program been used?

Why should the government continue to finance the program?

Is it an efficient program in terms of cost/benefits?

What is the Ministry doing to improve inefficient programs?

What new programs are needed to serve the needs of farmers?

This evaluation is conducted as an ex post facto study for the 1998 programs supported by the Alliance for the Countryside. It utilizes a combination of qualitative (data gathered in the form of office records, personal interviews with State functionaries and program beneficiaries, analyses of press releases, etc.) and quantitative (data gathered through the administration of survey questionnaires) methods of data collection. Frequently project evaluators of international development organizations like the World Bank and International Monetary Fund tend to apply cost-benefit analysis type tools to conduct program evaluation. Although this evaluation recognizes the importance of such information, it attempts to assess the impact of the program on the people, economy and the environment. This evaluation aims at (a) developing participant profiles--who benefitted from the programs; (b) determining the perceptions held by participants, suppliers and local functionaries about the programs supported by the alliance; and (c) assessing social-economic and environmental impacts of these programs. It aims at documenting the short-term impact of programs on agricultural production technology, agricultural production and social welfare. The information generated would be very helpful to planners and policy makers

to strengthen the existing program or develop new programs for rural and agriculture development. In addition, the 1998 evaluation results could serve as baseline information for long-term impact assessment.

The Evaluation Process Followed

Upon the request of the Ministry of Agriculture, a Central Support Entity for this evaluation was established under the auspices of the Food and Agricultural Organization of the United Nations. The Support Unit met with the officials of the related ministry and departments to define the goal and scope of this evaluation. The staff of the Central Support Unit proposed an evaluation framework that objectively measures the immediate and long-term impact of the programs supported by the Alliance for the Countryside.

The evaluation goals and objectives were established in close consultation with program managers and administrators at the national level. Once the goals were established and the programs to be evaluated were identified, the evaluation team at the Central Support Unit developed criteria and indicators to address the objectives of this evaluation. The following guidelines were used when establishing the evaluation criteria. They included: (1) all programs supported by the alliance should be evaluated following a uniform methodology; (2) people affected by the program should participate in the evaluation of the program; (3) as far as practicable, local institutions/consulting firms should conduct the evaluations as they are most knowledgeable about the program; and (4) evaluation studies should yield reliable and objective information.

Evaluation indicators were developed and shared with heads of all normative units under the Ministry of Agriculture. Indicators are observable phenomena that point toward the intended and/or actual condition of situations, programs, outcomes (Bennett and Rockwell, 1994) and help gauge the performance of natural systems as well as the human endeavors. Indicators can be used to measure the "health" of the economy or the environment, and monitor progress towards, or away from, stated goals, or point to a problem or condition (Suvedi et al, 1999). While selecting indicators for the evaluation of this project, the following characteristics of indicators were considered: (1) Is it measurable? (2) Is it relevant and easy to use? (3) Does it provide a representative picture? (4) Is it easy to interpret and does it show trends over time? (5) Is it responsive to changes? (6) Does it have a reference to compare it against so that users are able to assess the significance of its values? (7) Can it be measured at a reasonable cost? Once the indicators were developed for this evaluation, they were shared with the heads of the normative units and changes were made based upon their feedback.

The Central Support Unit also developed a methodological guide for this evaluation, including the terms of reference for the evaluators. Questionnaires were designed to solicit the opinions and related information from program beneficiaries, functionaries, service providers and local level organizations. Checklists and interview questions were also developed. An expert panel reviewed all data collection instruments for content and face validity. These instruments were pre-tested to determine the reliability and ease of administration. Necessary changes were made

based on the results of the pre-test and the instruments were made available to all evaluators in both electronic and hard copy formats.

Communication between the federal departments, state functionaries and the local evaluators was considered vital in this project. In order to facilitate the ease and timeliness of communication, the project hired a local consulting firm (INFODEM) for the development of a web site and a Windows based electronic data management system for this project. All information pertaining to the evaluation of projects including methodological guide, data collection instruments, instructions for data entry and data transfer to a centrally located server system, and the report preparation guidelines were made available through the Internet.

Considering the fact that there is a low level of evaluation expertise within the country, the Central Support Unit organized a week long evaluation workshop to interested evaluation firms. Only those individuals and agencies that participated in the evaluation workshop were allowed to apply for the evaluation projects.

Strategies for Assuring Objectivity and Precision of Evaluation Results

First, a rigorous process was followed in the selection of Evaluation Firms to evaluate each program in each State of the country. While selecting an Evaluation Firm, following criteria were used: (1) that the Evaluation Firm is registered for at least six months in advance before the selection process; and (2) that the Evaluation Firm has human resources with appropriate training and experience in program evaluation.

Second, all Evaluation Firms applying for the project were required to send their staff to attend a week-long evaluation workshop designed for this project. The workshop was organized to provide participants an overview of the Alliance for the Countryside, its goals and objectives, program evaluation methodology and data analysis and reporting requirements.

All three Consulting Firms at the national level received a Methodological Guide containing the criteria for each evaluation, evaluation questions and indicators, methods for gathering information, survey questionnaires and interview schedules, data entry guidelines, database management, and the reporting guidelines for final evaluation reports.

Finally, a two-fold supervision and follow-up system was established at the State level: the State Evaluation Sub-Committee will receive the preliminary evaluation reports and they will provide feedback as needed before the draft report is submitted to the National Consulting Firms for review and feedback. The National Consulting Firms will then review the report for accuracy of data interpretation and would provide feedback. Once the feedback was incorporated, the final report was submitted to the Central Supporting Unit.

Data Analysis

Seventy one consulting firms were engaged in the evaluation of 20 programs in 32 states. Most of these evaluators are private firms with experience in agricultural project appraisal. Three firms that conducted evaluation in multiple states accounted for almost one-third of the studies. Some academic and research institutions– including the Autonomous University of Chapingo and the Faculty of Agronomy of the University of Nuevo León, among others, were involved in the evaluation of selected programs.

This report summarizes findings from personal interviews with project beneficiaries. The analysis is based on the information from 22,157 beneficiaries of the *Alliance for the Countryside*. Not all respondents responded to all questions, so most variables had missing cases.

Descriptive statistics – frequency distributions, percentages, means and standard deviations-- are used to present findings. One way analysis of variance (ANOVA) and t-tests are used to determine differences in mean scores for various groups. Correlation coefficients and Chi-square tests are used to determine associations between selected variables.

It should be noted that the beneficiaries of technology transfer and phytosanitary programs included individuals from educational and non-governmental organizations engaged in rural development and therefore may reflect different demographic characteristics. For this reason, some analyses excluded the beneficiaries of these two programs.

SUMMARY OF FINDINGS

Beneficiaries' Background

Evaluators collected selected demographic information on beneficiaries of all programs. Findings indicated that nine out of 10 beneficiaries (92 percent) know how to read and write, and one out of five has a high school or higher level of education.

A great majority of respondents (80.6 percent) were engaged in agriculture and livestock production activities. Others were engaged in beekeeping, poultry, goat and pork production activities. A majority of respondents indicated that almost two-thirds of their production goes for the domestic market. Respondents from the northern states indicated that a significant proportion of their production goes for export. Almost one-fourth of the production by the beneficiaries in the central and sur states goes for self-consumption.

Almost two out of five beneficiaries of most programs– cotton, pasture land development, fertilization and irrigation, Kilo per Kilo, mechanization, coconut palm, oil palm, soyabean, vegetable protection, and pump irrigation-- indicated they were 55 years old or older. One out of four beneficiaries of the oil palm and ornamental horticulture programs (22.5 percent) were under 35 years of age (Table 1).

More than two-thirds of the beneficiaries of the citrus, kilo per kilo, oil palm, coconut palm, vegetable protection, soyabean and pump irrigation programs indicated a family income of less than 30,000 pesos per year. More than one-fourth of the beneficiaries of the cotton, fertilization and irrigation, and technology transfer program indicated an annual family income of 90,000 pesos or higher (Table 2).

This evaluation is limited to the programs supported by the Alliance during FY 1998. One out of every four respondents indicated that they applied for the subsidy in 1997. Fewer respondents (5 percent) indicated that they had applied for the subsidy during FY 1996 (Table 3). The major reasons for applying for the subsidy were to take advantage of subsidy, expand production, try a new technology or lower production cost (Table 4).

Time for Subsidy Approval

Beneficiaries were asked a series of questions to determine the amount of time it took to receive the subsidy. On an average, it took seven days to complete the application for subsidy, 40 days for the notification of approval of subsidy and 37 days from the date of notification to receive the subsidy. A longer time period was reported to receive subsidy for fertilization and irrigation, ornamental horticulture and lift irrigation programs. A relatively short time was reported to receive subsidy for kilo per kilo, lift irrigation, animal health, vegetable protection and technology transfer programs (Table 5).

When asked whether the subsidy arrived in time, the majority of farmers indicated it had. Nine out of 10 farmers who applied for subsidy for pump irrigation, animal genetic improvement and mechanization indicated that the subsidy arrived on time. Almost half of the soyabean and cotton growers indicated delay in receiving the subsidy (Table 6).

Amount of Subsidy Received

The amount of subsidy varied greatly by program. The largest subsidy was reported under the mechanization program. Overall, a relatively higher amount of subsidy was received by beneficiaries under cotton, fertilization and irrigation, animal genetic improvement and citrus fruit improvement programs. Several beneficiaries from these programs also indicated receiving subsidy for the second time (Table 7). On average, farmers under ornamental horticulture, kilo per kilo, soyabean and pump irrigation programs received a relatively lower amount of subsidy.

Sources of Knowledge about Alliance for the Countryside Programs

An attempt was made to find out farmers' sources of information about the Alliance for the Countryside program. Different sources were indicated by beneficiaries of various programs. For example, all respondents (100 percent) under the apiculture, pastureland development, milk improvement, better livestock, animal genetic improvement, lift irrigation and technology transfer programs indicated that they learned about the subsidy program when meeting with technicians and/or authorities of related programs (Table 8 a). Only a few farmers (about 5.1 percent) heard about the program through posters (Table 8 b). Over one-fourth of the

beneficiaries under agriculture and livestock production programs learned from fellow farmers (Table 8 c). Some 16 percent of the beneficiaries, particularly those with coconut and ornamental horticulture programs, learned about the program through interviews with representatives (Table 8 d). Mass media– TV, radio and newspaper– were not the major source of information for farmers (Table 8 e, f and g), except for beneficiaries of the animal health and technology transfer programs.

PEAT and/or SINDER technicians were the sources of information for beneficiaries of apiculture, pastureland development, milk improvement, better livestock, lift irrigation and animal genetic improvement programs (Table 8 h). Similarly, PEAT and/or SINDER technicians were the sources of information for most vegetable protection program beneficiaries. About 10 percent of beneficiaries under the agriculture program indicated that they learned about the subsidy program through municipal authorities.

Knowledge of the Program

Most of the respondents indicated that they were knowledgeable about the objective of the Alliance for the Countryside program. Findings (Table 9 a) show that beneficiaries' knowledge of the program ranged from 52 to 90 percent, with a mean of about 74 percent. Knowledge about the program's objective was highest among technology transfer program participants, followed by phytosanitary, livestock and agricultural improvement program participants.

When asked who provides financial resources for the Alliance for the Countryside program, two out of five respondents correctly reported that the resources come from both the federal and state governments (Table 9 b). When asked who decides on the assignment of subsidy, majority reported that both the federal and the state government make these decisions (Table 9 c). A majority of the beneficiaries under vegetable and animal sanitation programs did not answer this question.

Opinion About Subsidy Procedure

Beneficiaries were asked to indicate how they felt about the procedure (paperwork and bureaucracy) to get the subsidy. About two-thirds (66.6 percent) reported that the procedure was "easy", and about one-fifth (20.1 percent) indicated it was "normal." About one out of 10 respondents indicated the procedure was "hard"(Table 10 a).

When asked "how important is the subsidy for the beneficiary?", over three-fourths (76 percent) indicated that it was "very" important for them and only a few (3.2 percent) indicated it as "not at all" important (Table 10 b). Similarly, when asked, "what kind of problem is the program helping to solve?", almost all respondents indicated that the subsidy was helping to solve either a "very important" or an "important" problem (Table 10 c).

Received Technical Assistance?

The goal of the Alliance for the Countryside program is to provide a package of technical assistance and subsidy to boost agricultural productivity and profitability in Mexico. When asked whether the beneficiaries of the 1998 program received technical assistance, more than two-fifths (43.4 percent) indicated they had. It was noted that more than two-thirds of the farmers applying for subsidy under pastureland development, better livestock, kilo per kilo and genetic improvement programs reported not receiving technical assistance (Table 11 a). A majority of the beneficiaries of the lift irrigation, cotton, fertilization and irrigation, oil palm, coconut palm and technology transfer programs indicated receiving technical assistance.

About one-third (31.9 percent) of the respondents reported that they received training as part of the Alliance for the Countryside program (Table 11 b). A majority of farmers receiving subsidy under the pump irrigation and technology transfer programs reported receiving training.

Need for Complementary Services

More than two-thirds (68.4 percent) of the beneficiaries of the 1998 program of the Alliance for the Countryside program indicated that they needed complementary services in the form of technical assistance or training (Table 11 c). Training on how to handle equipment and machinery was suggested by the majority of farmers receiving subsidy under the lift irrigation program. Special training on how to use inputs was desired by about one-third (32.3 percent) of the farmers. Specifically, a majority of farmer beneficiaries under the coconut palm, vegetable protection, citric fruit improvement, cotton, kilo per kilo, soyabean and saline soil recovery subsidy programs indicated interest in receiving training on how to use inputs (Table 11 d).

Handling credit and finance was not an important area of assistance for most farmers. Only about one-third of the cotton and citric fruit improvement program beneficiaries indicated the need for technical assistance or training on handling credit and finance for their operations (Table 11 e). However, a need for technical assistance or training in marketing was expressed by the majority of beneficiaries of commodities such as cotton, citrus, coconut and oil palm (Table 11 f).

A need for technical assistance and training in areas of new production processes was expressed by the majority of participants under beekeeping, better livestock, lift irrigation and animal genetic improvement programs (Table 11 g). In general, livestock farmers indicated a greater need for training in better production processes and practices. Program participants in ornamental horticulture and pump irrigation expressed need for technical assistance and training in the use of new products for their enterprises (Table 11 h).

Willingness to Pay for Technical Assistance and Training

Farmers were asked if they were willing to pay for technical assistance and training services they receive from the Alliance for the Countryside Program. Findings indicated that about two-fifths of the farmers were willing to pay for such services (Table 12 a). The majority of subsidy recipients under ornamental horticulture, citric fruit improvement, beekeeping, fertilization and irrigation, saline soil recovery and soyabean programs were willing to pay for such complementary services. The willingness to pay for services was associated with the need for

services. For example, more beneficiaries under the pastureland development and pump irrigation programs indicated the need for training on how to handle equipment and machinery, and a larger proportion of them also indicated willingness to pay for such training (Table 12 b).

Only beneficiaries of the vegetable protection and better livestock programs indicated willingness to pay for services and training on how to use inputs (Table 12 c). Similarly, a smaller percentage (6 percent) of farmers expressed willingness to pay for technical assistance and training in areas of credit and farm financial management (Table 12 d). About one-third of the cotton, citric fruit improvement and ornamental horticulture producers indicated willingness to pay for marketing services of their farm products (Table 12 e). Beekeepers, livestock farmers and lift irrigation subsidy recipients indicated willingness to pay for training on new production processes (Table 12 g).

Differences in Beneficiary Perceptions by Program of the Alliance of the countryside

The programs under the Alliance for the Countryside were grouped under four categories: agricola (agriculture), ganadero (livestock), S.vegetal/S.Animal (phytosanitary) and transf.Tecn (technology transfer). It should be noted that out of 20 programs supported by the Alliance for the Countryside, 11 were for agriculture development, seven for livestock development, two for phytosanitary, and one for technology transfer. Analysis of variance (ANOVA) was used to determine difference among beneficiaries served by these four programs (Table 13). Findings showed that:

- Respondents under phytosanitary program reported the least amount of time required to get subsidy, and it was followed by technology transfer, livestock and agriculture programs and the mean differences were significant.
- Respondents under the agriculture programs received the highest amount of subsidy. It was followed by livestock, phytosanitary, and technology transfer program participants. However, the average amount of subsidy were not found to be significantly different from each other.

In addition, t-test was used to determine if beneficiaries of the agriculture development programs differ from the livestock development programs in terms of their perceptions about various aspects of the Alliance for the Countryside Program (Table 14). Findings showed that:

- Livestock farmers indicated significantly higher proportion of their produce going for the domestic market, less proportion was devoted for both export market and self consumption .
- Livestock farmers owned larger size farms but fewer acres with irrigation.
- Both agriculture and livestock farmers had raised bovine, pork, sheep and poultry. However, the herd size of most farm animals was larger for livestock farmers.

- Farmers receiving subsidy under agriculture development programs reported more acreage under grains, fruits and plantation crops than those under livestock programs.

Major Regional Differences in Beneficiaries and their Perceptions

To determine if significant differences exist between regions, the states were grouped into three regions: north (BC, BCS, Son, Sin, Dur, Chic, Coa, NL, Tamp and Nay); central (Jal, Col, Mich, Zac, SLP, Ags, Gto, Qro, Hgo, Mex, DF, Mor, Tlax and Pue); and sur (Ver, Tab, Camp, Yuc, Qroo, Chis, Oax and Gro). One way analysis of variance (ANOVA) was used to determine differences in characteristics and opinions among the beneficiaries in the three regions. Findings in Table15 show the following differences:

- The average size of land holding of respondents in the north region was almost three times greater than that in the central and sur regions. They also had a larger proportion of their land under irrigation. Respondents in the central region indicated most of their farmland was under rainfed conditions. The sur region had more land under forest.
- The north region tends to dominate livestock production, with more land devoted to cattle production, forage crops and grains. The central region tends to produce grains, flowers and cattle. Plantation crops, fruits and cattle are popular enterprises in the sur regions.
- Cattle, pork, sheep and poultry were raised in all regions. Herd sizes of cattle and sheep and sizes of poultry flocks were larger in the north than in the central and sur regions. Pork herds were larger in the sur regions.
- Beneficiaries in the north region indicated the shortest time required to process an application for subsidy, receive notification about the approval of the subsidy and getting the actual subsidy. They also indicated receiving a higher amount of subsidy than beneficiaries in the central and sur regions.
- Beneficiaries in the north region indicated a lower proportion of their production going for self-consumption than the central and sur regions; and the beneficiaries from the north also indicated that a higher proportion of their produce was designated for both export and domestic markets.

CONCLUSION AND RECOMMENDATIONS

The following assessment and the subsequent recommendations are based on my understanding of the findings of this study and the lessons I learned from the project activities. The opportunity to work closely with the FAO-SAGAR staff was very rewarding professionally. I was thrilled to find out the amount of work that had already gone in to this evaluation. Within one year, the central support unit under FAO-SAGAR was able to conceptualize this major evaluation effort and develop organizational arrangements to carry out 352 evaluative studies of 20 programs in 32

states. The amount of work completed in such a short time is remarkable. The project staff were successful in conceptualizing the framework, agreeing on evaluation criteria and indicators, developing uniform data collection instruments, preparing a methodological guide for program evaluators, organizing training sessions for program evaluators, developing the terms of reference and recruiting three national level consulting firms to provide monitoring and technical assistance services, and communicating with the normative units, state evaluation sub-committees, national support units and local consulting firms, an enormous task. I found that the performance of the central support unit under FAO-SAGAR has been outstanding.

This evaluation project, however, experienced several challenges during its implementation. Several adjustments and compromises were made in data collection procedures and database management. Lessons learned from the 1998 evaluations were instrumental in the design of the 1999 evaluation. The following recommendations resulted from lessons learned from the evaluation process and findings from the 1998 program evaluations.

Recommendations Based on the 1998 Evaluation Process

Need for a uniform methodology: It is recommended that a single database be developed, with the assistance of the national support units, for all 20 programs and be maintained at the central support unit under FAO-SAGAR. In addition, a uniform methodology should be applied to gather and analyze information to determine the impact of the program using the same agreed upon indicators. It seems the 1998 evaluations were weak in gathering information that show program impacts-- i.e., what happened as a result of this program. There is a need to reconsider the development of common impact indicators. Criteria for selecting indicators should be based on the complexity of data collection and analysis. It is also recognized that the technology transfer program tends to be somewhat different from other programs supported by the Alliance for the Countryside, and such deviations should be recognized as limitations. The database developed for these national programs could then be valuable to conduct meta analysis for an overall impact assessment of the Alliance on agricultural production vis-a-vis socio-economic development of the people of Mexico.

Improve database management: The quality of evaluation results depends on the quality of data collected and its availability for data analysis. The 1998 project evaluation data had several problems. The database did not allow evaluators to access data by state, by project and by information source-- i.e., farmers or other stakeholders. The data entry system accepted both numeric and alpha type data in all variables which allowed for errors in the data entry process. It is strongly recommended that the central support unit of the SAGAR-FAO office, along with the staff of the national support unit (i.e., PC, ESEC and PROINFA), discuss these issues and identify appropriate solutions.

Selection of consulting firms in future evaluation: Overall, the state evaluation sub-committees did an outstanding job in selecting consulting firms to conduct project evaluations. The background and experience, technical proposal and financial proposal were the major criteria for selecting consulting firms. Several state evaluation sub-committees apparently considered

only the financial criteria in the selection of the consulting firms, but it should be realized that the technical proposal and experience of the consulting firms are equally important for quality evaluation. Selection of firms mainly on the financial proposal could have an adverse effect on the quality of evaluation. It is recommended that an appropriate weighting system be utilized for each criterion for selecting consulting firms in the future.

Program evaluation training and technical support: The government of Mexico has decided to conduct the evaluation of the 1999 projects funded by the Alliance using organizational arrangements and procedures similar to those of 1998. The experience of the 1998 evaluation suggests that the staff of the central support unit should revise and update the methodological guide, data collection instruments, data entry and reporting procedures. Specifically, they should offer program evaluation training only to the participants from consulting firms selected for the 1999 evaluation. The training could be offered in two phases: the first phase should provide an overview of evaluation, expose participants to data collection instruments and procedures, sampling techniques, and data entry and transmittal to the central server. The second phase of the training should focus on data analysis and report preparation.

Recommendations Based on 1998 Evaluation Findings

Continue to serve diverse audience: The Alliance for the Countryside serves farmers from various socio-economic backgrounds— educational levels, age groups, farm size and income levels. The program should continue to serve the diverse audience in all states of Mexico.

Reduce time required for subsidy approval: On an average, it took seven days to complete the application for subsidy, 40 days for the notification of approval of subsidy and 37 days from the date of notification to receive the subsidy. The functionaries should learn from co-workers in kilo per kilo, animal health, vegetable protection and technology transfer programs about how to cut time for subsidy approval.

Amount of subsidy: The amount of subsidy varied greatly by program. Several beneficiaries of ornamental horticulture, kilo per kilo and soybean programs received a relatively smaller amount of subsidy. A careful review should be conducted to determine whether the level of subsidy provided for these programs is sufficient to improve agricultural production.

Market the Alliance for the Countryside Programs to intended audience: Beneficiaries' knowledge of the program ranged from 52 to 90 percent. Many farmers do not have an accurate knowledge of the objectives and goals of the Alliance for the Countryside. PEAT and/or SINDER technicians were the sources of information for beneficiaries of several programs. They should continue to market the program to a wider audience. Mass media could be utilized to market the program throughout the country.

Improve subsidy procedure: One out of 10 respondents indicated the procedure (paperwork and bureaucracy) required for the subsidy was "hard". As expected, farmers with less education and

lower incomes would benefit greatly by simplifying the subsidy process.

Subsidy and technical assistance should go together: The goal of the Alliance for the Countryside program is to provide a package of technical assistance and subsidy to boost agricultural productivity and profitability in Mexico. It was noted that more than two-thirds of the farmers applying for subsidy under pastureland development, better livestock, kilo per kilo and animal genetic improvement programs reported not receiving technical assistance. Technical assistance in the form of training on the use of equipments, improved inputs and new production processes was expressed by the majority of participants under beekeeping, better livestock, lift irrigation and animal genetic improvement programs. In general, livestock farmers indicated a greater need for training in better production processes and practices. Program participants in ornamental horticulture and pump irrigation expressed need for technical assistance and training in the use of new products for their enterprises. The program should make major efforts to mobilize extension workers and technicians to serve the educational needs of farmers in the countryside. Farmers expressed willingness to pay a small fee for such educational offerings.

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