

Agriculture Sector I

BEST AVAILABLE DOCUMENT

EVALUATION NUMBER: 522-81-
 Mission Title: Agriculture Sector I
 Country: AID/W Activity Code:
 Fiscal Year, Serial No. beginning with No. 1 each FY) 522-81-

REGULAR EVALUATION SPECIAL EVALUATION

5. KEY PROJECT IMPLEMENTATION DATES			6. ESTIMATED PROJECT FUNDING	7. PERIOD COVERED BY EVALUATION	
A. First PRO-AG or Equivalent FY <u>74</u>	B. Final Obligation Expected FY <u>80</u>	C. Final Input Delivery FY <u>80</u>	A. Total \$ <u>27,959,444</u>	From (month/yr.) <u>1/75</u>	To (month/yr.) <u>6/80</u>
			B. U.S. \$ <u>11,736,000</u>	Date of Evaluation Review: <u>12/80</u>	

B. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions and/or unresolved issues, cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., program, SPAR, PIO, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
<p>I. This evaluation is the final evaluation for the Agriculture Sector I Program. The only action which still needs to be undertaken in connection with this Program is to close out all further project reporting requirements and thereby to administratively acknowledge the fact that all project activities have been terminated.</p> <p>II. <u>LESSONS LEARNED</u></p> <p>(a) The shift of GOH emphasis from Agrarian Reform Programs to a more basic general development strategy caused the <u>Model Agrarian Reform Fund</u> sub-projects impact to be limited to those <u>asentamientos</u> (cooperatives) initially chosen as model <u>asentamientos</u>. Given the political environment in which the 1974 agrarian reform program was conceived, this shift was predictable and should have been foreseen. Consequently, this sub-project should have been portrayed primarily as an action program and justified on those grounds instead of as a model for future agrarian reform efforts.</p> <p>(b) The project paper indicates that the <u>Cooperative Window</u> of the National Development Bank would play an active role in administering credit funds to cooperatives, campesino organizations, and independent small farmers. It now appears, however, that the details of how the Cooperative Window would function were not clarified. The project paper envisioned the Cooperative</p>	D. Johnston USAID/AGR	6/30/81

R. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS

- | | | |
|--|--|---|
| <input type="checkbox"/> Project Paper | <input type="checkbox"/> Implementation Plan e.g., CPI Network | <input type="checkbox"/> Other (Specify) <u>N/A</u> |
| <input type="checkbox"/> Financial Plan | <input type="checkbox"/> PIO/T | <input type="checkbox"/> Other (Specify) <u>N/A</u> |
| <input type="checkbox"/> Logical Framework | <input type="checkbox"/> PIO/C | |
| <input type="checkbox"/> Project Agreement | <input type="checkbox"/> PIO/P | |

10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT

- A. Continue Project Without Change
- B. Change Project Design and/or Change Implementation Plan
- C. Discontinue Project

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)

David Johnston, Agriculture Economist, USAID/Honduras
 Arturo Galo Galo, Chief of the Coordination Unit for External Financing, Ministry of Natural Resources
 Leo L. Ruelas, Mission Evaluation Officer
 Dean Bernius, Project Support Officer

12. Mission Office Director Approval

Signature: [Signature]
 Typed Name: L. Ruelas
 Title: L. Ruelas, Acting Dir
 Date: 6/17/81
 Office: USAID/Honduras

Window as a way to accelerate credit approvals in the bank as well as a coordinating entity for interinstitutional participation in developing farm plans and providing follow-up technical assistance. In practice, however, the Cooperative Window was never given credit approval authority and simply became another layer of bureaucracy between the farmer and final approval of his credit request. Efforts by personnel in the Cooperative Window sub-project to coordinate technical assistance among sector institutions were similarly ineffective because the Cooperative Window was not given authority to coordinate technical efforts. The lesson to be learned here is that an institution or office cannot function effectively if it is given responsibility for doing a job but not authority for organizing the personnel and resources needed to accomplish the task. The Cooperative Window is an excellent example as it was given responsibility for organizing and coordinating the efforts of several institutions but was not given control over the personnel from these institutions who were to carry out the work. Achievement of project goals consequently became dependent upon personal relations and goodwill rather than upon clear-cut lines of responsibility and authority.

- (c) The Coordination Management, Planning and Evaluation sub-project took an important first step toward achievement of coordinated agriculture sector planning. Unfortunately, the goals set forth and the program of activities laid out in the project paper were

more ambitious than the G.O.H. was willing (or able) to implement. This sub-project subsequently turned out to be a very good example of "ivory tower" development planning which creates new offices or institutions to resolve problems with which it does not know how to deal. The crucial problem for this sub-activity was interinstitutional coordination of planning and evaluation activities at the Ministerial and Technical levels. This problem was addressed by creating the Agriculture Sector Coordinating Committee (COCO) and the Office of Sectoral Planning (OPS) which was supposed to resolve disagreements at the Ministerial level and then coordinate planning efforts. This didn't work because the OPS was not given control of the planning units in the major sector institutions. Later when the COCO was replaced by the Agricultural Policy Commission (CPA) and the OPS was replaced by the Technical Secretariat of the CPA (ST/CPA) the same problem continued. Three lessons may be drawn from this experience. First, a host country government program will normally not move any faster than technicians and/or power brokers wish it to. A.I.D. must therefore tailor its projects better to coincide with host government interests and efforts. This means that host country technicians should have been more intimately involved in project design. If you cannot resolve issues at the design stage it is unlikely you will be able to resolve them at the implementation stage. Second, coordinating committees cannot be expected to achieve effective coordination unless they have some control

over the people who will actually be involved with implementation. Even then, A.I.D. will need to monitor this type of project very closely and actually be involved in project implementation if we want to know what is happening. Third, if we set up projects requiring coordination and it becomes apparent that the project is suffering from a lack of cooperation on the part of one or more institutions, we should be prepared to redesign or close out the activity. Any other course of action is interpreted by host country government officials as our acceptance and/or approval of the status quo (lack of coordination).

- (d) The Agriculture Education Activity sub-project was one of the smoothest running parts of the sector program. Part of the reason for its success should be attributed to the fact that it has been administered by the Agricultural Credit Institute (EDUCREDITO) which was created by an administrative contract between EDUCREDITO and the Ministry of Natural Resources. This allowed day to day administrative details to be taken out of the government and entrusted to an institute staffed by capable and experienced personnel. The lesson to be learned here is that if one wishes projects to run smoothly, one must have capable and experienced personnel who are given the responsibility and authority to implement the project. Unfortunately, due to low salaries there is a scarcity of capable and experienced G.O.H. personnel. By the time a capable employee acquires a fair

measure of experience, he or she is usually offered a position in the private sector or a position with an international or bilateral development program. In this sub-project, it was only possible to retain the services of experienced and capable personnel by moving administrative responsibility for this sub-project out of the government. To the extent possible, it would be helpful if USAID/Honduras would urge the G.O.H. to sub-contract administrative tasks to other non-governmental institutes or organizations. This lessens the administrative responsibilities of G.O.H. employees and allows each project to move ahead with fewer complications. Of course, this approach will only be effective if the new institutes are given the authority to administer and implement these activities on their own initiative without securing G.O.H. approval of everything they do. This was done in the case of EDUCREDITO which was even allowed to seek reimbursement for expenses directly from A.I.D. It is also worth noting that operating expenses for EDUCREDITO were assured by agreeing to pay EDUCREDITO 15% of the direct costs of each scholarship. This had the effect of assuring that EDUCREDITO had sufficient funds to operate and also gave EDUCREDITO an incentive to manage as many scholarships as it could since each additional scholarship resulted in additional operating capital for EDUCREDITO.

- (e) The principal lesson to be learned in the Vehicle Maintenance sub-project was that projects must have the active support of

local institutions if they are to be successful. In this case, MNR administrators never gave a very high priority to developing an efficient national vehicle maintenance program so it was not developed. One suspects that this may be a case where A.I.D. pressured the local government into accepting the vehicle maintenance sub-project as part of the sector program. Clearly, if this was the case, it was a mistake as the G.O.H. did not demonstrate the will to stabilize nor take corrective action when problems on this activity were called to their attention.

- (f) The decision to use relatively more capital intensive production techniques in the Asentamiento Access Roads sub-project was made after considering the feasibility of proceeding with the labor intensive construction technique. It was determined that the cost of local labor (which was relatively high in the areas where the roads would be built) and the very short dry season would make it difficult to construct these roads using the labor intensive construction technique exclusively. The relatively short time available for the projected road construction was an additional factor mitigating against adoption of the labor intensive construction methodology. The lesson to be learned here is that the appropriate construction methodology to be used on a particular road should be determined by studying factors such as labor availability in the local area, wage rates, rainfall patterns, availability of complementary resource and other local factors. The decision on which construction

methodology is most appropriate for a particular road should be based upon these local conditions instead of upon an arbitrary judgement that 1/2 the roads should use a capital intensive methodology and 1/2 the roads should use a labor intensive technology.

- (g) Sectoral efforts such as the Agriculture Sector I program require strong commitments and extensive coordination if they are to be successful. In this project, volatile political issues associated with the agrarian reform effort and the high capital costs associated with land settlements were not fully considered in the design of the project and expectations with respect to coordination and commitments were clearly overly optimistic in light of the complex issues involved.
- (h) Salary supplements used in this project have proven to be a feasible incentive in attracting and retaining qualified personnel. The advantages and disadvantages of incentives are, however, complex and extensive and it is essential that these issues be clearly understood when an incentive program is designed. In the Agriculture Sector I program, incentives were used with considerable success but not without problems. The USAID's experience with incentives is further discussed in Section 2 UNPLANNED EFFECTS.

13. Summary

The Agriculture Sector I program was built upon the premise that major economic and social gains will be generated from the agricultural sector given its predominant importance to the economy of Honduras. Accordingly, the Agriculture Sector I program concentrated on those broad constraints which were impeding the accelerated development of the agricultural sector.

Comprised of eight distinct sub-projects, the Sector I program concentrated on the strengthening of Honduran public sector institutions; increasing the capacity of these institutions to design, manage and implement sound development activities and extending and improving the outreach of these institutions in terms of servicing the rural poor. In addition, the program supported a range of infrastructural projects which would provide the base for a major expansion of development activities in the sector.

Despite problems and the failure of certain sub-activities to fully achieve their objectives, the Agriculture Sector I program must be considered as a success. In total, the project: financed over \$3.0 million in credit to some 5700 small farmers, many of whom had never had credit before; provided credit and technical support to 53 asentamientos (cooperatives); financed agricultural, planning and other training for 325 long term and over 1700 short term participants; strengthened the extension service through technical

assistance and the provision of vehicles and other material support; financed the construction of 53 primary roads totalling over 304.1 kilometers; established an improved seed program which distributed close to 5,000 metric tons of improved seeds; strengthened sector planning capabilities and financed the establishment of a centralized Ministry of Natural Resources (MNR) vehicle maintenance facility. In total numbers, this program reached an estimated 138,000 people with improved services and access. In sum, despite problems and failures in some areas, the Agriculture Sector I program succeeded in establishing the base for the accelerated development of the agriculture sector. Moreover, in demonstrating the appropriateness of attacking sector constraints, it laid the base for the Agriculture Sector II Program which will build upon the achievement of the earlier sector program and continue institutional strengthening efforts.

The follow-on Agricultural Sector II has three major systems; (1) Human Resources Development, which is comprised of Participant Training, In-Service Training and development of the Agricultural University Center (CURLA); (2) Institutional Development, comprised of an Agricultural Planning System, an Information System, a Marketing Analysis System and Administrative Reform and (3) Delivery of Services and Related Inputs, which will focus on Extension Improvement, Sub-regional Cooperative Service Centers, Farmer Training, Administration of Credit, Zonal Infrastructure Packages and Small Farmer Consumption Improvements.

In the implementation of all of these activities, the personnel trained under the Sector I program constitute an important resource. These personnel are providing the emphasis for accelerated development while local capacities for long-term training are strengthened. In the areas of extension improvement, cooperative strengthening, and credit administration, Ag. Sector I financial assistance was utilized to train, equip and organize, thus, establishing the base for accelerated programs in these areas. In credit, technical assistance to the National Agricultural Bank resulted in the development of organizational and management recommendations and manuals. Unfortunately, the Bank has yet to complete the organizational restructuring and re-directing which is required if the Bank is ever to function efficiently. The manuals and recommendations should, none the less, be useful once the hard political decisions are made regarding the reorganization of the Bank. Improvements and experience gained under the Sector I and other projects will also be helpful in refining the use of the farm plans as the basis for credit approval.

The strengths and weaknesses of sector planning capabilities were also clearly identified during the implementation of the Sector I Program. While agriculture planning has proven to be a difficult problem to resolve and remains almost non-existent, the frameworks for understanding and improvement has been established.

Program problems and shortfalls were encountered in attempting to

establish a centralized vehicle maintenance facility, in improving the efficiency and outreach of the National Agricultural Bank and, to a lesser degree, in improving sector Coordination, Management, Planning and Evaluation. In certain areas limited progress was made. Overall sector planning, however, remains in desarray.

In the area of vehicle maintenance, a strong commitment was lacking. In hindsight, interest on the part of the G.O.H. may have been weak as this subactivity suffered measurably from a lack of strong G.O.H. commitment and direction. A lack of G.O.H. commitment equally hampered efforts to improve the operations of the National Agricultural Bank. Accordingly, while the T.A. funded under this program succeeded in developing new organizational and administrative formats and procedures, the Bank continues to move very slowly in implementation of the suggested changes. In the meantime, the Bank continues to flounder.

The Agriculture Sector I program represented an innovative attack on obstacles impeding the development of the agriculture sector. It was expected that coordination and administrative problems would be the greatest barriers to the implementation of this sectoral program and this has proven to be correct. The creation of a coordination Unit to handle administrative and coordination matters related to this project was, thus, a necessity. While this mechanism has been of tremendous value, administrative and coordination problems continue to nag this project. In some cases, such as that of the Proveeduría,

the Coordination Unit lacked the political strength to materially affect the procurement processes. The result was a less than totally responsive procurement process.

As noted, while these problems were anticipated their importance was underestimated. If they had been properly recognized, project expectations would, undoubtedly, have been scaled back. The results of this program, accordingly, should be weighed in the context of the ground work it laid and the essential but difficult strides made in effecting improved G.O.H. planning, coordination and administration.

14. EVALUATION METHODOLOGY

This evaluation is the final evaluation for the Agriculture Sector I Program. As noted in Section 13, this program consists of eight sub-projects which may be thought of as falling into two groups: 1) sub-projects which benefit the rural poor directly by providing them with credit, technical assistance, and improved transportation facilities; and 2) sub-projects which benefit the rural poor indirectly by strengthening G.O.H. institutions that provide services to the rural poor.

The project paper envisioned that the sub-projects falling into group 1 (i.e., the Model Agrarian Fund, the Cooperative associations, and the Asentamiento Access Roads sub-projects) would use the impact evaluation methodology as a means of measuring increases in the rural poor's well-being over the life of this Program. To this end, an impact evaluation was conducted in 1975 which provided important baseline data for the Agriculture Sector I Program, and indeed for the sector as a whole. Initially, it was planned to include a second impact evaluation for these three sub-projects as part of the final evaluation for the Agriculture Sector I Program. Unfortunately, timing and financial constraints did not permit the impact evaluation to be carried out at the time of the final evaluation and it was decided the impact evaluation would be included as a component of the first Agriculture Sector II evaluation. (See attached Action

Memorandum for the Director dated March 24, 1980 which provides the rationale for this decision.) The evaluation, planned for the first year of the Sector II, will update the baseline data collected in 1975.

The other five sub-projects which provided indirect benefits to the rural poor were included in this final evaluation. These sub-projects are as follows: Coordination, Management, Planning and Evaluation; Extension Services Support; Improved Seed Program; Agriculture Education Activity, and Vehicle Maintenance. A contract for evaluating these five sub-projects was advertised and subsequently awarded to a consortium of three local firms (Fortin Lagos y Asociados, INVEST, and Mendieta y Asociados). These firms worked with representatives of the Coordination Unit for External Financing in the MNR who assisted the contractors in obtaining copies of pertinent evaluation materials. The primary methodology used by the contractors was to review all available letters, reports, and interview project officers and office directors responsible for implementing activities in each sub-project. The purpose of this Evaluation was to measure progress achieved against original targets, to provide information of relevance to the Agriculture Sector II and other programs and to evaluate experience and lessons learned.

15. EXTERNAL FACTORS

The Agriculture Sector I program and, in particular, the Model Agrarian Reform Fund was adversely affected by waning government interest in and enthusiasm for agrarian reform. This was due, principally, to the realization that the beneficiary/cost ratio for integrated rural development projects such as the Model Agrarian Reform Groups is prohibitively high. In short, the government lacks the wherewithal to build the roads and other infrastructure necessary to support an extensive agrarian reform settlement effort. A second factor has been the realization that the agrarian reform population represents only about 10% of the agricultural population whereas small farmers with no land or less than one hectare represent some 45% of the agricultural population. Policy makers have consequently questioned the advisability of pursuing such an expensive development strategy for 10% of the agricultural population when another 45 or 50% of the population receives relatively few services.

The waning of G.O.H. enthusiasm for integrated agrarian reform programs coupled with implementation difficulties in other sub-projects coincided with increased recognition of the need for additional training at all levels by both Mission and G.O.H. officials. The result was that combined A.I.D. and G.O.H. funds devoted to the training activity increases from \$1,763,000 to \$3,638,268 over the life of this sub-project.

Experience with the vehicle maintenance sub-project suggests that the MNR has not viewed the vehicle maintenance program as a real priority item. The Ministry has consequently not assigned the personnel or resources to the Program which are required if it is to function efficiently. The reasons for this lack of concern regarding the Program are probably the result of a host of external factors which have placed a multitude of demands upon the time of MNR officials and the resources they have available. These external factors have consequently created the present situation of the vehicle maintenance sub-project which is characterized by insufficient budgets, in-action and administrative neglect.

There were no significant factors affecting the other sub-activities.

16. INPUTS

No major problems were encountered with respect to inputs. These included;

Sub-project #1. Model Agrarian Reform Fund

- \$4.0 million in A.I.D. Credit funds (loan).
- \$2.5 million in G.O.H. counterpart.

Note: This proved to be more than was needed and in 1978 a series of transfers were made which reduced A.I.D. loan funds for this activity to \$1,775,700. G.O.H. counterpart increased by roughly \$2.2 million to cover the reduction in A.I.D. funds.

Sub-project 2. The Cooperative Window

-Two loan funds totaling \$3,162,500 were used to provide production and investment credit to independent small farmers.

Of this total, \$1,155,000 was provided by A.I.D. loan funds and \$2,007,500 was provided by counterpart funds. Loan funds totaling \$242,500 were also used to pay for technical assistance to the Direccion de Fomento Cooperativo.

Sub-project 3. Coordination, Management, Planning and Evaluation

- Technical assistance (to the Sectorial Analysis, and Evaluation Departments of the Sectoral Planning Division of the MNR); long-term training; short courses; funding of MNR contracts for personnel working with planning, evaluation, and data collection activities; minor equipment and materials. The A.I.D. input totalled approximately \$1,156,000.

- The G.O.H. input of \$125,000 and the A.I.D. Loan input \$125,000 were both used to establish a revolving fund to finance purchases of improved seed equipment, parts, and supplies needed to make essential repairs and improvements for grain drying and processing equipment.

- G.O.H. funds amounting to roughly \$1,775,000 covered costs such as personnel, office space, office materials and equipment, travel and per diem expenses, and other types of support items.

Sub-project 5. The Agricultural Education Activity

- Combined G.O.H. and A.I.D. funds were used to finance training activities over the period 1975-79 as follows:

1) Long-term training	\$3,208,088
2) Short-term training	<u>450,180</u>

Sub-project 6. Extension Services Support

- Under this sub-project, 175 additional vehicles were purchased. Forty-three vehicles purchased with A.I.D. loan and 132 vehicles purchased with G.O.H. counterpart.
- 60 person/months of A.I.D. loan funded technical assistance.
- \$40,000 in loan funds to purchase materials needed for demonstration plots and experiments undertaken by the 4-H program, the National Research Program, the Seed Potato Program, the Citrus Project, the Beekeeping Project, and other minor extension services activities.
- The respective dollar inputs of A.I.D. and the G.O.H. were \$381,782 and \$658,300 respectively.

Sub-project 7. Vehicle Maintenance

A.I.D. funds totaling \$1,286,223 were used to:

- Finance construction of 2 central and 6 regional vehicle maintenance facilities;
- Provide 3 1/2 years of technical assistance for the MNR's vehicle maintenance program;
- Purchase repair equipment such as hydraulic hoists, jacks, hand tools, steam cleaners, etc., needed for the new maintenance facilities;
- Purchase adequate supply of spare parts.
- The G.O.H. counterpart of \$562,000 funded salaries, office space, supplies and land for repair facilities.

17. Outputs

Sub-project 1. Model Agrarian Reform Fund

The project design called for the provision of production credit and supporting technical assistance to forty selected asentamientos (cooperatives) comprised of 1,576 families working 10,454 manzanas of land. A total of \$4.0 million in A.I.D. and \$2.5 million in G.O.H. counterpart funds were to be provided under the terms of the agreement.

This sub-project exceeded these targets. In total, \$4.0 million in A.I.D. and \$3.1 million in G.O.H. funds were provided to 53 asentamientos comprised of 1,673 member families and farming 15,954 manzanas.

Sub-project 2. The Cooperative Window

This activity consisted of two loans funds aggregating \$3.5 million entitled "Small Farmer Cooperative Production Credit Fund (\$2.0 million) and "Small Farmer Cooperative Credit Fund (\$1.5 million). Under the terms of the agreement, A.I.D. provided \$2.0 million and the G.O.H. \$1.5 million. In total, the organizations which handled these funds expected to reach the following numbers of small farmers: Fomento Cooperativo (4,800 - 5,800); FONDHESA (30-50,000); CONACAL (1,600) and FACACH (8000) using a combination of project and

privately obtained resources.

This sub-project provided \$3,125,000 in loans to 5,727 independent small farmers who used this credit to finance production costs and/or capital improvements on 60,139 mzs. of land. The amount actually disbursed for this purpose was therefore equal to 90% of the target level. The remaining funds were transferred to: The Coordination, Management, Planning and Evaluation Activity, the Agricultural Extension Activity, and the Vehicle Maintenance Activity.

Sub-project 3. Coordination, Management, Planning and Evaluation

The project design called for A.I.D. to provide a total of \$821,000 (\$731,000 in loan and \$80,000 in grant) and the G.O.H. to provide \$500,000 for the range of management, planning and evaluation activities which were to be undertaken.

This sub-project was designed to improve and promote greater coordination of agriculture sector planning efforts at the sectoral level and within the Ministry of Natural Resources (MNR). At the sectoral level, the project paper called for creation of a forum where Ministerial level decisions could be reached. One of the most important outputs of this sub-project was the creation of the COCO and later the CPA which acted as this forum. Over the life of this sub-project, the CPA was able to promote adoption of a common language and common methodologies by the various institutions working

in the agricultural sector.

Within the MNR, this sub-project attempted to strengthen the Ministry's planning capability by providing assistance to the following four departments of the Division of Sectoral Planning (DPS): Statistics Department; Sectoral Analysis Department; Project Development Department; and the Evaluation Department. The goals envisioned here by the project paper were: (1) to create a strong and dynamic Sectoral Analysis Division which would provide the Minister of Natural Resources with data, analyses of alternate policies, and sets of coordinated planning alternatives which would improve the efficiency of the MNR's programs; and (2) to allow the MNR to act as the lead agency in development of viable and coordinated agriculture sector plans. These were very ambitious goals, and unfortunately, the Sectoral Planning Division was not able to completely achieve either of them. The DPS did however take some initial steps toward achievement of these goals and it is hoped that progress will continue to be made in the future.

Sub-project 4. The Improved Seed Program

A revolving seed fund was established to finance purchases of improved seeds, and support improvements in the seed program's drying and handling capabilities. Over the life of this sub-project, the Improved Seed Program produced 1,418 MT of improved corn seed, 977 MT of improved bean seed, 2,142 MT of improved rice seed, and 3,543 MT

of improved sorghum seed for a total of 4,891 MT of improved seed production during the period 1975-1979. This is equal to 92% of the target level (5,289 MT) established in the project paper, which was based upon 100% utilization of existing G.O.H. plant capacity.

Sub-project 5. The Agricultural Education Activity

The project paper provided guidance regarding the types of short courses which should be offered but did not set target levels for numbers of participants. The actual short courses offered followed quite closely the guidelines presented in the project paper and one hundred fifty-three short courses were prepared for 1,761 participants over the period 1975-79. Of this total, 351 were extensionists, 881 were campesinos and 529 were employees of agriculture sector institutions. The project paper also projected that 160 persons would be given long-term training. In fact, of the 325 participants for long term training, 22 discontinued training for academic or personal reasons, 93 have finished their studies and returned to Honduras, and 210 were in the process of finishing their studies when this evaluation was being prepared.

Sub-project 6. Extension Services Support

The purpose of the Extension Services Support Activity was to transfer techniques to significantly improve small farmer production, productivity, and net incomes. This purpose was to be achieved by:

assisting the National Extension Service to expand the number of extension personnel from 74 in 1974 to 230 in 1978; by providing technical materials needed for demonstration plots. During the life of this sub-project, considerable progress was made toward achievement of these goals. During the period of 1974-79 extension service personnel were increased from 74-201 (an increase of 127 extensionists which is 61% of the level programmed in the project paper). This increase allowed the extension service to provide technical assistance to individual farmers and groups that had 501,042 hectares under cultivation during the period 1975-79. The vehicles purchased under this sub-project allowed the extension service to achieve a ratio of 1.5 extensionists per vehicle and 1.1 supervisors per vehicle by 1978. Although the data regarding the numbers of demonstration plots set out by the research staff, 4-H groups, and the Citrus Project is incomplete, available initial returns indicate that these three arms of the extension program set out or conducted over 5,600 demonstration plots and variety trials during the period 1977-79.

Sub-project 7. Vehicle Maintenance

The project paper called for the construction of two central and six regional vehicle maintenance shops, stipulated that this sub-project would provide four years of technical assistance to the MNR vehicle maintenance program and called for the purchase of equipment and spare parts. By the end of this project, all of these inputs had

been provided or accomplished. A consultant was hired and spent 3 1/2 years providing technical assistance to the vehicle maintenance program. Unfortunately, the MNR adopted few of the consultant's recommendations and this technical assistance cannot be considered a successful output. Instead, the principal outputs of this sub-project are the two central and six regional vehicle maintenance facilities constructed with loan funds and the equipment and spare parts which were purchased with loan funds. With the construction of these new facilities, a vehicle maintenance capability has been established at the regional level and the regional directors of the MNR now have the capability to control and administer effective vehicle maintenance programs. Unfortunately, this capability is not being utilized effectively and its potential for strengthening of G.O.H. agriculture activities remains unrealized. Administrative reforms, procedural changes, strong higher level support, and increased numbers of technical personnel are all badly needed to make this program operate efficiently.

Sub-project 8. Asentamiento Access Roads

The Project paper specified that this sub-project would build approximately 350 kilometers of roads which would provide access for 70 model cooperatives. During the period 1975-78, 53 access roads with a total length of 304.1 kms. were constructed (87% of the projected levels). In addition, this sub-project produced the following indirect outputs: higher farm gate prices for agricultural

production; lower farm gate prices for agricultural inputs; lower farm gate prices for agricultural inputs; increased access to health and educational facilities; and increased mobility which widens the horizons and opportunities of cooperative members and others served by these access roads.

18. PURPOSE

The purpose of the Agriculture Sector Program was to assist the G.O.H. with the creation of small farmer groups of various kinds in order to increase the efficiency of public sector development efforts. This purpose was to be accomplished in two ways. First, through provision of management, technical and financial resources which would assist with this effort and also demonstrate our moral support for this activity. Second, by supporting the effective expansion of Honduran institutional outreach which would permit agricultural institutions to reach increasing numbers of peasants and small farmers.

The success of this project in meeting or achieving its End of Project Status (EOPS) is summarized in Section 13 Summary and Section 17 Outputs of this report.

19. GOAL/SUBGOAL

The goal of the Agriculture Sector Program was to increase the well-being of the rural poor by providing them with increased access to resources such as credit, improved all-weather roads, and various types of technical and social assistance. Evidence of the projects success in this regard can be seen from the following statistics.

1. Under this program \$4,275,700 dollars of credit was made available to asentamientos (cooperatives) for production credit under the model asentamientos sub-project.
2. Under the Cooperative Window Sub-project, \$3,162,500 was loaned to small farmers for production credit and capital development credits.
3. Under the Improved Seed Activity, 107,599 QQ. (4,891 MT) of improved seed were produced and distributed to Honduran basic grain farmers.
4. Under the agricultural education activity, 1,761 participants were trained in 153 short courses while 325 participants were given scholarships for long-term training.
5. During the life of the project, the number of extension personnel were increased from 74 in 1974 to 201 in 1978, an

increase of 127 extensionists. With these additional personnel, the extension service was able to provide technical assistance to individual farmers and groups with 501,042 hectares under cultivation during the period 1975-78.

6. By the end of 1978, 53 roads totaling 304.1 kms. had been constructed which provided 61 model cooperatives access to primary road systems. These roads also provided access to improved transportation services for an undetermined but significantly larger number of small villages and independent small farmers living near these roads.

20. BENEFICIARIES

As noted in Block 14. Evaluation Methodology, plans to evaluate the model Agrarian Reform Fund, Cooperative Window and the Asentamiento Access Roads activities using the impact evaluation methodology were delayed and this will now be accomplished under the Agriculture Sector II program. Accordingly, the impact of these activities could not be evaluated or determined in this evaluation. The other five sub-projects provided indirect benefits.

Over 130,000 people received direct benefits from the Agriculture Sector I program. This was in the form of production loans, training, improved seeds, technical assistance as provided through the extension service or increased access. While an in-depth impact evaluation is not being undertaken, at this time, on the sub-projects which affected most people, it is evident from project site visits that production increases have been achieved and should be sustainable. Increased economic activity is visible in the project areas and there is some physical evidence that incomes in the project area are moving upward. These observations are unsupported, however, by any statistical evidence.

The following provides beneficiary impact data by sub-project:

Sub-project 1. Model Agrarian Reform Fund

A total of 1,673 asentamiento members received loans through this

activity. Assuming that each member has an average of six beneficiaries, a total of 10,038 persons were directly benefited by this credit program. Note: The impact of this activity will be evaluated under the Sector II program.

Sub-project 2. The Cooperative Window

A total of 5,727 independent small farmers received credit from this sub-project. Assuming that each farmer has an average of six beneficiaries, a total of 34,362 persons were directly benefitted by this sub-project. Note: The impact of this activity will be evaluated under the Sector II Program.

Sub-project 3. Coordination, Management, Planning and Evaluation

To date, the principal direct beneficiaries of this sub-project have been the technicians who have received training through short or long term courses, on the job training or through their close contacts with technical assistance personnel. The institutions in which these technicians are employed have also benefited in that they are now better equipped to deal with planning, management and evaluation responsibilities. Benefits to the sector and the country will accrue when these institutions plan, more efficiently implement and evaluate development programs.

Sub-project 4. The Improved Seed Program

The improved seed program has benefited farmers using the seeds and also consumers by increasing the availability of basic grains. If one assumes that an average small and/or medium size farmer produces 3 ha. of corn, rice and/or sorghum and 1 ha. of beans, approximately 48,555 farmers were benefited by the improved seed program.

Sub-project 5. The Agricultural Education Activity

The direct beneficiaries of this sub-project were the 325 scholarship recipients who were sent for long-term training and the 1,761 technicians, extensionists and campesinos who received training in one of the 153 short courses financed under this sub-project. A large number of the long-term trainees have yet to return so the impact on their respective employing institutions cannot be determined. Initial returns from the few that have returned and from the short-term trainees have been quite positive. Observation suggests that the training is being put to good use and that project design, monitoring, implementation and evaluation processes are slowly improving in the sector institutions associated with this training program.

Sub-project 6. Extension Service Support

Direct beneficiaries of the extension sub-project include farmers and groups receiving technical assistance and 4-H club members.

Extension Service records show that in 1978, extension agents provided technical assistance to 7,920 individual and group farmers. Assuming that a similar number of farmers received assistance in 1977 and 1979, over 23,700 farmers received technical assistance from the extension staff. Records for the period 1977-79 also show that extension personnel worked with 6,198 4-H club members. Lastly, while there is no data available on the numbers of farmers benefited by technical assistance visits of the Citrus Project staff, it seems reasonable to conclude that a total of well over 30,000 farmers received technical assistance or other services from extension service personnel during the period 1977-79.

Sub-project 7. Vehicle Maintenance

Direct beneficiaries include the administrator and several mechanics who were trained under this activity. Slightly less direct are the extensionists and other MNR personnel who have better vehicles to drive and less down-time. Indirect beneficiaries include those farmers serviced by MNR personnel who utilize the services of the vehicle maintenance units.

Sub-project 8. Asentamiento Access Roads

If one assumes an average of 25 members for the cooperatives served by these access roads and an average of 6 dependents per member, then 9,150 people benefited directly from the 53 roads serving 61 model

cooperatives which were served by these access roads. Note: The impact of this activity will be evaluated under the Sector II program.

21. UNPLANNED EFFECTS

- a. Salary supplements used under this project have proven to be an effective incentive in terms of attracting and keeping qualified personnel. Supplements, however, have both advantages and disadvantages and it is essential that they be understood, accompanied with clear procedures and rules governing their use and, monitored closely. The lack of clear and agreed to rules and procedures caused a number of administrative and coordination problems in the Agriculture Sector I program.

Salary Supplement - Principal Advantages

- Incentive to attract and keep project personnel.
- Supplements often offset the low pay of host government personnel and thus frees them from the necessity of working at two jobs.

Salary Supplement - Principal Disadvantages

- Creates competition among donors for limited number of trained professionals.
- Government may consider supplement as "salary" and, thus, not give adequate consideration to overall salary situation.
- Difficulty in establishing limits and rules governing supplements.

- Salary supplements have a way of becoming self-perpetuating.

The issue of supplements on a limited project basis as on a large scale i.e. Agriculture Sector basis remains to be settled. Based on experience gained under this Project, host government salaries are inadequate to attract and retain the competence it so badly requires and Governmental revenues are inadequate to support major salary adjustments. This experience in the agriculture sector also applies to the other sectors. Given that Honduras' major economic growth will be generated from the agriculture sector and based upon Agriculture Sector I experience, limited salary supplements to principal agriculture sector institutions may be necessary to accelerate the sector growth and overall revenues which can eventually be returned to the sector in the form of higher salaries. Based on this belief, limited supplements are being continued under the Agriculture Sector II program. A.I.D. does not, however, wish to get caught in a self-perpetuating system of supplements. Accordingly, U.S.A.I.D. considers this extension or continuation to be temporary while discussions are initiated with respect to the future of the salary supplement program and improved regulations governing the award of such supplements are developed.

- b. Counterpart funding for the Improved Seed Program sub-project was only 76% of the amount originally projected. This shortfall

resulted in administrative weaknesses which impeded production and distribution of the improved seed program and thereby lessened the programs effectiveness.

- c. Counterpart personnel were the primary recipients of the technical assistance offered to the MNR in the vehicle maintenance program. This included an administrator and several mechanics. Soon after these people were trained, they quit their jobs in the MNR and took higher paying jobs in the private sector. The result is that most of the technical assistance and training has been lost to the MNR.

- d. Originally, two road construction techniques were to have been used during the first phase of this Asentamiento Access Roads sub-project. One technique called for the G.O.H. to design roads and for private contractors to build them. Community development consciousness raising and establishment of a community organizational structure which would handle minor or emergency maintenance was to be contracted out to INA and CARE/Honduras. The second technique was to be labor intensive. Under this technique, the G.O.H. would design the roads while a group such as CARE/Honduras would educate citizens in the value of the road program, purchase materials, contract local laborers, and establish a community organization for construction and maintenance. A private consultant would supervise construction. Unfortunately this sub-project got off

to a slow start. The G.O.H. took nearly 18 months to issue the agrarian reform regulations needed to give legal standing to the cooperatives. After this, the Ministry of Natural Resources, the Agrarian Reform Institute, and the National Development Bank did not quickly agree on which settlements to designate as "models". By 1977, three years after the project was signed, the Mission and the G.O.H. decided that the labor intensive approach was not appropriate for the access road sites which had been selected, and they decided to use a relatively more capital intensive approach. The principle reasons for using more capital intensive techniques resulted from undependability in community organizations for providing maintenance and the short dry seasons which necessitated rapid repairs of extended road sections (beyond the capability of most community maintenance groups).