

A.I.D. EVALUATION SUMMARY - PART I

PD-ARI-943

1. BEFORE FILLING OUT THIS FORM, READ THE ATTACHED INSTRUCTIONS.
2. USE LETTER QUALITY TYPE, NOT "DOT MATRIX" TYPE.

IDENTIFICATION DATA

A. Reporting A.I.D. Unit: Mission or AID/W Office <u>USAID/Peru, ORD</u> (ES# _____)		B. Was Evaluation Scheduled in Current FY Annual Evaluation Plan? Yes <input checked="" type="checkbox"/> Slipped <input type="checkbox"/> Ad Hoc <input type="checkbox"/> Evaluation Plan Submission Date: FY <u>93</u> Q <u>4</u>		C. Evaluation Timing Interim <input type="checkbox"/> Final <input checked="" type="checkbox"/> Ex Post <input type="checkbox"/> Other <input type="checkbox"/>	
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D. Activity or Activities Evaluated (List the following information for project(s) or program(s) evaluated; if not applicable, list title and date of the evaluation report.)

Project No.	Project /Program Title	First PROAG or Equivalent (FY)	Most Recent PACD (Mo/Yr)	Planned LOP Cost (000)	Amount Obligated to Date (000)
968-2058	Support to Agricultural Production in Drought Affected Areas	1992	09/93	2,821	2,821

ACTIONS

E. Action Decisions Approved By Mission or AID/W Office Director	Name of Officer Responsible for Action	Date Action to be Completed
<p>Action(s) Required</p> <p>The Project terminated on September 30, 1993 No further actions by the Mission required.</p>		

BEST AVAILABLE DOCUMENT

(Attach extra sheet if necessary)

APPROVALS

F. Date of Mission Or AID/W Office Review Of Evaluation: _____ (Month) _____ (Day) _____ (Year)

G. Approvals of Evaluation Summary And Action Decisions:

	Project/Program Officer	Representative of Borrower/Grantor	Evaluation Officer	Mission or AID/W Office Director
Name (Typed)	Edilberto Alarcon	Abel Paucar, ADRA Mario Rios, CARITAS Frank Bogren, CARE	William Egan	George Wachtenheim
Signature	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
Date	4/25/94	1 <i>[Signature]</i> 2/5/94 2 <i>[Signature]</i> 3/3/94 3 <i>[Signature]</i> 1/6/94	<i>[Signature]</i>	<i>[Signature]</i>

A B S T R A C T

H. Evaluation Abstract (Do not exceed the space provided)

The purpose of the Emergency Project "Support to Agricultural Production in Drought Affected Areas" (EP) was to provide assistance to subsistence farmers in 762 peasant communities (PC) in the highlands of Peru, which had been severely affected by the 1991/92 drought. The EP was implemented by CARE, ADRA/OFAESA and CARITAS (Private Voluntary Organizations - PVO). The final evaluation was carried out by a team of Peruvian Associated Professionals (AP) with the support of the AID Monitors. It was based on: documents, reports and interviews in the PVOs offices; and visits and surveys in 146 PCs. The evaluation had several objectives: a) determine the progress made toward meeting the EP objectives; b) identify problems and constraints; c) evaluate the execution procedures and the response of the PCs; d) analyze the economic profitability; and e) make recommendations for future projects. The most significant conclusions are:

- By providing seeds of food crops and fodder crops, fertilizers, and technical assistance, the EP facilitated and reinforced the 92/93 cycle of agricultural and livestock production for 40,374 families living in PCs in subsistence economy conditions and affected by the recurring drought. A total of 9,642 MT of potatoes and cereals were harvested, as well as 12,273 MT of fodder crops.
- The agricultural and livestock production resulting from the 92/93 cycle contributed to improving the family diet and increasing the farmers' income through their small quantities of surplus crops.
- The economic evaluation shows an adequate profitability for this project, with a B/C ratio of 1.11 for the 92/93 cycle and 1.03 for the following five years.
- The EP set up 344 committees to manage the revolving stocks of seeds and other inputs, which were well accepted by the peasant farmers. Approximately 1,646 MT of seed were recovered for the 93/94 cycle.
- The development of the EP led to an intensification of the families' farming activities during the 92/93 cycle, since the cultivated area increased substantially. The EP also led to a drastic reduction in the temporary migration of the peasants.
- The EP reinforced the community organization. The people became more aware of the importance of communal work and showed a high degree of participation. The women played a highly significant role, showing great interest and enthusiasm.
- The EP introduced minimal improved farming techniques. The peasants tended to assimilate these technologies well.
- The capacity of the implementing agencies involved proved insufficient to cope with the needs of such a large beneficiary population in the project area. Their personnel were spread too thin resulting in inefficiencies.

The evaluators noted the following "lessons"

- A project comprising agricultural inputs only is not the most adequate. It should include other complementary aspects, such as technical assistance, small irrigation works, a livestock component and storage facilities.
- Due to the late approval of the Project by OFDA, funds arrived in the middle of the sowing season. Funds should arrive about four months before the start of the agricultural campaign, to enable the project implementors enough time to acquire high quality inputs.

C O S T S

I. Evaluation Costs

Name	Affiliation	Contract Number OR TDY Person Days	Contract Cost OR TDY Cost (U.S. \$)	Source of Funds
1. Evaluation Team				
Luis Rivera Arispe	Team Leader	60 days	\$30,000	Project 968-2058
Ricardo Samame Mera	Agronomist	60 days		
Maria Loayza Alatrasta	Sociologist	60 days		

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2. Mission/Office Professional Staff Person-Days (Estimate) _____ 20	3. Borrower/Grantee Professional Staff Person-Days (Estimate) _____ 60
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A.I.D. EVALUATION SUMMARY - PART II

SUMMARY

J. Summary of Evaluation Findings, Conclusions and Recommendations (Try not to exceed the three (3) pages provided)

Address the following items:

- | | |
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| <ul style="list-style-type: none"> • Purpose of evaluation and methodology used • Purpose of activity(ies) evaluated • Findings and conclusions (relate to questions) | <ul style="list-style-type: none"> • Principal recommendations • Lessons learned |
|--|--|

Mission or Office:

USAID/Peru, ORD

Date This Summary Prepared:

4/29/94

Title And Date Of Full Evaluation Report:

Support to Agricultural Production in Drought Affected Areas - Sept. 1993.

1. Purpose and Methodology of the Evaluation

The final evaluation was conducted by a team of Associate Professionals (AP), with the support of the advisors/monitors provided by USAID/Peru. It was based on the review of the project documents, reports written by the 3 implementing PVOs, interviews with Project personnel, visits to 146 Peasant Communities (PC) and surveys applied to beneficiary peasants. The evaluation objectives were: to a) determine the degree of progress made toward meeting the Project objectives and identify any problems and constraints which may have prevented those objectives from being met; b) evaluate execution procedures and the responses of the PC; c) make an analysis of the economic profitability of the Project; and d) make recommendations for future projects of this variety.

2. Purposes of the Evaluated Activities

The purpose of the Emergency Project (EP) executed between 10/92 and 09/93 was to provide emergency assistance to subsistence farmers in 754 PC belonging to eight Departments of the Peruvian highlands which had been badly affected by the 1991/92 drought. The Project was implemented by the Private Voluntary Agencies CARE, ADRA/OFASA and CARITAS.

3. Findings and Conclusions

- The EP facilitated and reinforced the 92/93 cycle of agricultural and livestock production for 40,374 peasant or subsistence agriculture families affected by the recurring drought. With 2,306 MT of seeds of food and fodder crops, plus 1,334 MT of fertilizers, and partial technical assistance for the cultivation of 8,250 hectares of land, mostly dry-farmed, harvests of 9,641 MT of potatoes and cereals and 12,273 MT of fodder crops were obtained.
- The agricultural and livestock production resulting from 92/93 cycle contributed to improving the peasant families' diet, which consists mainly of their own produce, slightly raising their nutritional level, and enabling them to obtain additional income from their small quantities of surplus crops and their livestock production.
- The EP set up 344 committees to manage the revolving stocks of seeds and other inputs. The operation was facilitated by the community organizations prevalent in the region and the peasant farmers' ample acceptance of the revolving system. They recognized it as a means of support which, together with the assistance provided, would enable them to set up communal storehouses and cope with future

needs for agricultural inputs. Approximately 1,646 MT of seeds were recovered for the 93/94 cycle.

- The delay in delivery of the funds for the purchase of inputs due to the late approval of the Project by OFDA, was a decisive factor in the level of goal achievement. It meant that it was too late to acquire top-quality seeds; and also that, since they were sown late, the seeds were exposed to the risk of frost. The yields were affected accordingly.
- The economic evaluation shows an adequate profitability for this project, with a B/C ratio of 1.11 for the 92/93 cycle and 1.03 for the following five years. These results indicate that the EP permits an adequate level of recovery of the productive activity; and this is without taking into account the indirect positive effects.
- The capacity of the agencies involved proved insufficient for the huge numbers of needy families in the project area. The implementing agency personnel were extended too thin resulting in inefficiency.
- The development of the EP led to an intensification of the families' farming activities during the 92/93 cycle, since the cultivated area increased substantially, and rural infrastructure work was carried out.
- The increased amount of productive work in the communities led to a drastic reduction in the temporary migration of the peasants and, in some communities, it even motivated "return migration" of a number of families.
- The peasants showed a high degree of participation in all the Project-related productive activities, motivated principally by the seeds offered, which were consistent with their traditional farming and food taste preference habits. They were also motivated by the support in food products, materials, tools, veterinary products, and the construction of reservoirs and water wells. The women played an outstanding role. They realized how important the project components were for the economic and nutritional security of their families, and this motivated them in particular. Their productive activities increased and became even more diversified. However, the women had little participation at leadership levels.

The EP reinforced the community organization. The people became more aware of the importance of communal work and showed greater interest and awareness in making joint efforts to carry out the various communal activities.

- The EP introduced minimal improved farming techniques to raise crop productivity: improved seeds, chemical fertilizers and better methods of cultivation. The peasants tended to assimilate these technologies well.

- The EP made it possible to overcome the level of social assistance needed in this situation of socioeconomic emergency caused by the drought and the social conditions prevailing in the EP area. A significant step forward has been the rehabilitation of the peasants' productive capacity and organizational experience; and the improvement of their technical and cultural level.

4. Principal Recommendations

- Considering the economic and social results obtained, and the strategic importance of the EP achievements, the project should have established some mechanisms to continue monitoring and providing limited advice on the operations of the revolving stock. This would have consolidated the process as well as the general organization of the Project's assisted communities.
- Since the quality of the seed is so important for the success of these type of projects, the implementing agencies should have conformed consolidated procurement teams with highly qualified personnel to select the best agriculture inputs available.

5. Lessons Learned

- A project comprising of the distribution of agricultural inputs only is not the most adequate. It should include other complementary aspects, such as technical assistance, small irrigation works, a livestock component and storage facilities.
- Although USAID/Peru had requested approval of the Project in early July 1992, OFDA was able to approve the Project only in the last days of September. Consequently, funds were made available in the middle of the sowing season. For future projects, the funding should arrive about four months before the start of the agricultural cycle, to enable the project implementators to acquire high quality inputs in good time and plan the project activities better.
- If there is to be an adequate systematization and maximum profit gained from the experience, the executing agencies should coordinate their project-management criteria for any similar project in the future.

ATTACHMENTS

K. Attachments (List attachments submitted with this Evaluation Summary; always attach copy of full evaluation report, even if one was submitted earlier; attach studies, surveys, etc., from "on-going" evaluation, if relevant to the evaluation report.)

Full Evaluation Report.

COMMENTS

L. Comments By Mission, AID/W Office and Borrower/Grantee On Full Report

The evaluation has been performed in accordance with the Scope of Work by a team of three experienced Peruvian professionals.

The findings and lessons learned cited are very much in accordance with the conclusions reached by A.I.D.

With regard to the comments that the Project funds were made available late, USAID notes that the majority of funds provided by OFDA to this project were composed of various "end-of-the year" remnants from OFDA accounts. Consequently, funds were transferred to the Mission in the last days of FY92 resulting in the Grant Agreement being signed on September 30, 1992 in the middle of the sowing season. USAID had requested approval of this Project in early July, 1992. Had OFDA made their decision shortly thereafter, the inputs could have been brought on time and a better selection made.

The Mission is proposing in its 1995-1996 Action Plan, a Sustainable Natural Resource Management Project which implementation would start in FY 1995. The goal of this project is to assure the sound management of the natural resource base. It is expected that the soil and water conservation techniques that will be disseminated under this new Project, will mitigate the effects of future drought conditions in the Peruvian highlands.

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**AGRICULTURAL PRODUCTION SUPPORT PROJECT
IN DROUGHT-AFFECTED AREAS**

**FINAL PROJECT EVALUATION
FINAL REPORT**

PROJECT No. 968-2058

ITEM No. 72-1121037

SOURCE: USAID / PERU

SEPTEMBER 1993

**"AGRICULTURAL PRODUCTION SUPPORT PROJECT
IN DROUGHT-AFFECTED AREAS"**

FINAL PROJECT EVALUATION

PROJECT No. 968-2058

SOURCE: USAID / PERU

CONSULTANTS:

**LUIS RIVERA ARISPE, Agronomist
SULEMA LOAYZA ALATRISTA, Sociologist
RICARDO SAMAME MERA, Agronomist**

SEPTEMBER 1993

TERMS OF REFERENCE USED FOR THE PROJECT EVALUATION STUDY

**"AGRICULTURAL PRODUCTION SUPPORT PROJECT
IN DROUGHT-AFFECTED AREAS"**

CHAPTER I SYNTHESIS OF THE EVALUATION

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1. GOALS AND RESULTS
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3. CONCLUSIONS AND RECOMMENDATIONS

CHAPTER I

EVALUATION SYNTHESIS

1. SYNTHESIS

The purpose of the Emergency Project "Agricultural Production Support Project in Drought-Affected Areas" (EP) was to provide emergency assistance to the subsistence farmers in 762 peasant communities (PC) in the Andean highland region of Peru, which had been severely affected by the 1991/92 drought. The EP was implemented by CARE, ADRA/OFASA and CARITAS (Private Voluntary Agencies - PVA). The final evaluation was carried out by a team of Associated Professionals (AP) with the support of the AID Monitors. It was based on: documents, reports and interviews in the PVA offices; and visits and surveys in 146 PC. The evaluation had several aims: to determine how much progress had been made toward meeting the EP objectives, to identify problems and constraints, evaluate the execution procedures and the response of the PC, analyze the economic profitability and make recommendations regarding readjustments for future projects. The most significant conclusions are:

- By providing seeds of food crops and fodder crops, fertilizers, and technical assistance, the EP facilitated and reinforced the 92/93 cycle of agricultural and livestock production for 40,374 families living in PC in subsistence economy conditions and affected by the recurring drought. A total of 9,642 mT of potatoes and cereals were harvested, as well as 12,273 mT of fodder crops.
- The agricultural and livestock production resulting from the 92/93 cycle contributed to improving the family diet, slightly raising the peasants' nutritional level, and enabling them to obtain additional income from their small quantities of surplus crops and their livestock production.
- The economic evaluation shows an adequate profitability for this project, with a C/B of 1.11 for the 92/93 cycle and 1.03 for the following five years. These results indicate that the EP permits an adequate level of recovery of the productive activity.
- The EP set up 344 Committees to manage the Revolving

Loan Funds of seeds and other inputs, which were well accepted by the peasant farmers. Approximately 1,646 mT of seed have been recovered for the 93/94 cycle.

- The development of the EP led to an intensification of the families' farming activities during the 92/93 cycle, since the cultivated area increased substantially, and rural infrastructure work was carried out. The EP also led to a drastic reduction in the temporary migration of the peasants, and in some communities it even motivated the "return migration" of a number of families.
- The peasants showed a high degree of participation in all project-related productive activities. The women played a highly significant role, showing great interest and enthusiasm, because of the importance they attached to the EP components for the security of their families.
- The EP reinforced the community organization. The people have become more aware of the importance of communal work and are showing greater interest in making joint efforts to carry out the various communal activities.
- The EP introduced minimal improved farming techniques. The peasants tended to assimilate these technologies well.
- The EP alleviated the situation, emphasizing the creation of productive activity rather than social assistance work.
- The capacity of the agencies involved proved insufficient to cope with the needs of such a large beneficiary population in the project area. The agencies redoubled their efforts, but thereby lost in efficiency.
- Due to the strategic importance of the results achieved by the EP for the development of agriculture and livestock farming in the PC, it is recommended that a regular five-year project be started up immediately.

The evaluators indicate the following "lessons":

- A project comprising agricultural inputs only is not the most adequate: it should include other complementary aspects, such as irrigation infrastructure, technical assistance, a livestock component and sales

infrastructure.

- The funds should arrive about four months before the start of the agricultural campaign, to enable the project conductors to acquire high quality inputs in good time and plan the project activities better.

2.1 PURPOSE OF THE EVALUATED ACTIVITIES

The purpose of the Project executed between 10/92 and 09/93 was to provide emergency assistance to subsistence farmers in 754 PC belonging to eight Departments of the Peruvian highlands which had been badly affected by the drought in 1991/92. The Project was implemented by the Private Voluntary Agencies CARE, ADRA/OFASA and CARITAS.

2.2 SUMMARY OF A.I.D. EVALUATION, PART II

. PURPOSE AND METHODOLOGY OF THE EVALUATION

This final evaluation was conducted by a team of AP, with the support of the Advisors/Monitors supplied by AID-Peru. It was based on the revision of the project documents, reports written by the PVA, interviews with Project personnel, visits to 146 PC and surveys applied to beneficiary peasants. The purpose was to determine the degree of progress made toward meeting the Project objectives and to identify any problems and constraints which may have prevented those objectives from being met; to evaluate execution procedures and the responses of the PC; make an analysis of the economic profitability of the Project; and make recommendations regarding readjustments for future projects.

2.3 RESULTS AND CONCLUSIONS

- The EP facilitated and reinforced the 92/93 cycle of agricultural and livestock production for 40,374 peasant families living in a situation of subsistence economy, and affected by the recurring drought. With 2,306 mT of seeds of food crops and fodder crops, plus 1,334 mT of fertilizers, and partial technical assistance for the cultivation of 8,250 hectares of land, mostly dry-farmed, harvests of 9,642 mT of potatoes and cereals and 12,273 mT of fodder crops were obtained.
- The agriculture and livestock production resulting from

the 92/93 cycle contributed to improving the peasant families' diet, which consists mainly of their own produce, slightly raising their nutritional level, and enabling them to obtain additional income from their small quantities of surplus crops and their livestock production.

- The EP set up 344 committees to manage the revolving loan funds of seeds and other inputs. The operation of the loan funds was facilitated by the community organization predominant in the region and the peasant farmers' ample acceptance of the funds. They recognized the loan fund as a means of support which, together with the assistance provided, would enable them to set up communal storehouses to be able to cope with future needs for agricultural inputs. Approximately 1,646 mT of seeds were recovered for the 93/94 cycle.
- The delay in delivery of the funds for the purchase of inputs was a decisive factor in the level of goal achievement. It meant that it was too late to acquire top-quality seeds; and also that, since they were sown late, the seeds were exposed to the risk of frost. The yields were affected accordingly.
- The economic evaluation shows an adequate profitability for this project, with a C/B of 1.11 for the 92/93 cycle and 1.03 for the following five years. These results indicate that the EP permits an adequate level of recovery of the productive activity; and this is without taking into account the indirect positive effects.
- The capacity of the agencies involved proved insufficient for the huge numbers of needy families in the project area. The agencies redoubled their efforts, but thereby lost in efficiency.
- The development of the EP led to an intensification of the families' farming activities during the 92/93 cycle, since the cultivated area increased substantially, and rural infrastructure work was carried out.
- The increased amount of productive work in the communities led to a drastic reduction in the temporary migration of the peasants and in some communities it even motivated the "return migration" of a number of families.
- The peasants showed a high degree of participation in

all the Project-related productive activities, motivated principally by the seeds offered, which were in keeping with their traditional farming and eating habits. They were also motivated by the support in food products, materials, tools, veterinary products, and the construction of reservoirs and water wells. The women played an outstanding role. They realized how important the project components were for the economic and nutritional security of their families, and this motivated their highly participatory attitude. Their productive activities increased and became even more diversified. However, the women had little participation at leadership levels.

- The EP reinforced the community organization. The people became more aware of the importance of communal work and showed greater interest and awareness in making joint efforts to carry out the various communal activities.
- The EP introduced minimal improved farming techniques to raise crop productivity: improved seeds, chemical fertilizers and better methods of cultivation. The peasants tended to assimilate these technologies well.
- The EP made it possible to overcome the level of social assistance needed in this situation of socioeconomic emergency caused by the drought and the social conditions prevailing in the EP area. A significant step forward has been the rehabilitation of the peasants' productive capacity and organizational experience; and their technical and cultural training has improved.

2.4 PRINCIPAL RECOMMENDATIONS

- . Considering the economic and social results obtained, and the strategic importance of the EP achievements, a regular five-year project should be started immediately, redimensioning the levels of the present project to bring them into line with the handling capacity of the executing agencies and the follow-up mechanisms.

This will reinforce in the PC the process of capitalization of the revolving loan funds, intensifying the technical and cultural training of the peasant men and women, and motivating and assisting the PC to consolidate their organizations, so that they may become

dynamic agents of development.

- . The peasant communities' response to the PE requirements justify that an ongoing effort be made to consolidate the emergency committees, so as not to waste the progress that has been achieved in their organization and functioning.

Since the selling of ~~inputs~~ and products is so important for agriculture and livestock farming activities, this aspect should be coordinated in future projects of this nature.

2.5 LESSONS LEARNED

- . A project comprising agricultural inputs only is not the most adequate: it should include other complementary aspects, such as irrigation infrastructure, technical assistance, a livestock component and sales infrastructure.
- . The funding should arrive about four months before the start of the agricultural cycle, to enable the project conductors to acquire high quality inputs in good time and plan the project activities better.
- . If there is to be an adequate systematization and maximum profit gained from the experience, the executing agencies should coordinate their project-management criteria for any similar project in the future.

CHAPTER II

GENERAL

1. PROJECT OBJECTIVES

1.1 GENERAL OBJECTIVE

To alleviate the serious economic situation and lack of food besetting the poorest peasant families in the Departments of Cajamarca, Arequipa, Puno, Cuzco, Apurimac, Ayacucho, Huancavelica and Junín, by means of economic technical assistance to enable the beneficiary population to prevent the loss of their harvests from the 1992-1993 cycle.

1.2 SPECIFIC OBJECTIVES

- To support the agricultural production by providing inputs during the 92-93 agricultural cycle.
- To improve the diet and nutrition of the peasant families in the eight Departments mentioned.

2. PROJECT DESCRIPTION

The agencies responsible for the execution of the Project were the PVAs ADRA/OFASA, CARE and CARITAS, according to the terms of the agreements signed by them on September 30, 1992 with the institution financing the project.

The Project began, as planned, with the purchase of inputs for each zone (seeds, chemical fertilizers and guano). The inputs were then distributed, and the seeds were sown. However, the delay in the arrival of the funding caused a series of problems: for example, fewer inputs could be acquired and it was difficult to obtain high quality seeds.

Training programs were conducted during the course of the Project, and a monitoring and advising system was put into practice by two AID professionals. Once the crops had been harvested, the revolving loan funds started receiving the repayments, as stipulated in the regulations drawn up by each of the executing agencies.

3. EXECUTING AGENCIES

Specific plans of action were drawn up for each of the executing agencies, according to the characteristics of

the area and the conditions of each agency.

4. PROJECT EVALUATION

Two distinct phases were established for the project evaluation. The first phase consisted of analyzing the information in the field, defining the appropriate methodology for the collection of the information and its systematization.

The second phase comprised the analysis of the information gathered, the defining of evaluation criteria and the preparation of the reports.

For the field evaluation, representative samples were selected from the universe of communities, to include the different ecological levels, types of agriculture (irrigated and dry-farmed), technological level, degree of dispersion of the population and accessibility of the area.

The social evaluation seeks to determine: the participation and response of the beneficiaries; the women's role; the community organization and its adaptation to the project requirements; the impact of the project on family incomes, the employment of peasant labor, the family's nutritional level; and the beneficiaries' perception of achievements and constraints in the execution of the project.

CHAPTER III

GENERAL FRAMEWORK FOR PROJECT EVALUATION

1. METHODOLOGY USED

A project evaluation is an analysis which enables us to visualize the amount of progress made in relation to the objectives set, so that we may then reformulate the work plans or consolidate the project results.

Progress made in covering the set objectives implies not only the carrying out of a specific series of activities, but also that they be executed under specific conditions. "How it was done" is more important than "What was done". It is often possible to meet project goals 100%, without having achieved the desired objectives.

The evaluation therefore asks three questions: How were the results achieved? How was the action administered? How was progress consolidated? The efficiency of the work done can thus be realistically measured.

The first question refers to the dynamics of the work carried out directly with the beneficiaries. Aspects considered are: how the activities related to each other and to the objectives; how cooperation was established with representatives and with other institutions working in the area; what kind of strategies were used regarding the beneficiaries' response or regarding external factors which distorted the work, etc.

The second question refers to how well the agency has organized itself to carry out its work: activities directly relating to project execution as well as auxiliary support actions; how it coordinates its work with other agencies; its internal work dynamics, and how it organizes its data.

The third question refers to how the agency makes use of the partial results to consolidate them and subsequently make even better progress. This point deals with how well the institution learns from its experience, how it systematizes its achievements, whether its work is being replicated, how much progress it has made in the process of technology transfer, etc.

2. EVALUATION CRITERIA

The project evaluation seeks to measure the efficiency of the

work performed and the impact achieved. These results need to be defined in specific terms and quantified through certain indicators which can, as a whole, be associated with levels or trends of project efficiency behavior.

The following paragraphs contain some evaluation indicators grouped into three aspects: criteria referring to the project's conceptual frame, to its organization and its operation.

- CRITERIA REFERRING TO THE CONCEPTUAL FRAME

This set of criteria is used to evaluate the concepts which were the starting point for execution of the project. The success of a project does not only depend on its having the appropriate resources, methodologies and strategies, but also on its being based on correct planning at the level of basic propositions, to identify the context into which the project is being inserted, how far it will be possible to act, and with what parameters it will be managed.

The main criteria are:

- Management of Objectives and Policies:

Compliance with the overall objectives of a project is attained insofar as its specific objectives are explicitly or implicitly established, according to the level of project management.

- Permanent Analysis of the Environment

Although the diagnosis is made in the phase prior to the execution of the project, the institution's view of the environment in which it is working can not be static. The institution should periodically analyze the situation, in order to adapt its program of activities and its strategies to any changes in the project environment.

- Planning and Defining of Priorities

Planning is a process, and therefore it can not be established in one sole period. Changing conditions make it necessary for the project to adapt continually.

- Organization of Follow-up and Evaluation

In the measure in which follow-up and evaluation are

understood to be processes of analysis and feedback for future action, these stages will become decisive factors for better compliance with objectives and better utilization of resources.

- CRITERIA REFERRING TO ORGANIZATION

These criteria are those which measure how the institution establishes and adapts its operational strategies for project execution. The agency's internal organization as well as its organization in relation to other institutions or entities will together determine the ease or the difficulty experienced by the agency in making use of the available resources.

The principal criteria are:

- Adaptation of the Organizational Structure

The organization of a project is also an important aspect which affects the adequate use of resources.

- Institutional Coordination

- Internal Work Dynamics

A last aspect to be taken into account regarding this type of criteria is the way the work is performed inside the project. This includes human relations, technical capacity, awareness of the importance of the project, an adequate combination of personnel, among other factors. Generally speaking, this refers to how the human resources relate to one another, and how, together, they relate to the project objectives.

- CRITERIA REFERRING TO PROJECT OPERATION

The criteria defined here relate to the way the project work was actually performed: the coherence existing between the various project activities, the strategy for adaptation to any changes taking place outside the project, the relationship with intermediaries or other entities directly or indirectly associated with the project.

The principal criteria are:

- Effectiveness of action

This is measured on the basis of three central aspects: the work in relationship to project objectives; the work

in relationship to the beneficiaries; and the work in relationship to the quality of the action.

- Strategic Management

This refers to the project's capacity to adapt to changes that may occur in the environment during a course of action. The agency must have sufficient ability to react to changes occurring in factors outside the project and thus achieve results appropriate to the new conditions.

- Relationship with Beneficiaries

This is another determining factor to define whether or not a project is performing properly. Since the ultimate purpose of a project is for the beneficiaries to learn from the project experience, there must be a clearly established relationship between the project and the beneficiaries.

3. BASIC ASSUMPTIONS

As well as handling the criteria appropriate to each case, the project evaluation implies the establishing of propositions or basic assumptions with regard to certain information which is not directly available but which is inferred because it is expressed in specific replies or responses.

The assumptions used are:

- ADMINISTRATIVE AND TECHNICAL ASSUMPTIONS

- The information contained in documents supplied is accurate.
- The PVAs submitted various items of information regarding the execution of their activities in the Project.

The estimates (productions, yield, etc.) were assumed to be accurate, except in some cases where the evaluating team considered that they should make their own estimates, due to the incompatibility of certain figures.

- Problems in seed acquisition were a consequence of the need to comply with time limits.

In most of the cases, the offices made deficient purchases of potato seed. These problems could not have been due to ignorance, since the PVAs have sufficiently well qualified personnel. It is assumed that these deficiencies were due to market constraints and to the need to purchase quickly in order to be in time for the sowing dates.

In this case, the initial problems were determined by effects external to the agencies' management capacity.

- Adjustments recommended by the Monitors were not immediately assimilated due to administrative imbalances,
- Because of the density of beneficiaries per technician, the technical assistance and training programs were limited.

Bearing in mind the number of technicians belonging to each of the offices and the characteristics of the training given, we consider that in many cases the technical support has not complied with reaching a significant percentage of the beneficiary families.

- The technology taught was truly assimilated by the beneficiary population.

Transferring new production techniques to the peasant population implies a whole process which, in many cases, needs to span two agricultural cycles before the new techniques are assimilated. However, it is assumed that most of the population has had some contact with these techniques in the past, so that it was not difficult for them to assimilate this new proposal.

- ECONOMIC ASSUMPTIONS

- The financial aid supplied by the project is assumed to be the only assistance which made it possible for the goals to be met.

In many of the PVA offices, activities were carried out with the families identified as beneficiaries using funding from different programs and even from different sources.

Nevertheless, since it is difficult to separate the

benefits obtained by each project, it is assumed that the achievements indicated in the reports correspond to the results of this particular Project.

- Sales projections were based on average market prices.

In each case, the most conservative market prices were used: prices defined on historic calculations and for the production in the field.

- The whole of the production offered to the market will be sold.

This assumption is made, in order to evaluate the project results more easily, even though part of the production may be used to recover revolving loan fund stocks or for home consumption.

- SOCIAL ASSUMPTIONS

- The social response to the revolving loan funds is a permanent attitude.

Although the revolving loan funds are an organizationally different proposition to the systems existing in the peasant communities, it is assumed that during the course of the project the population has assimilated the concept and integrated it into their own social conscience.

- The communities attended to are well consolidated units.

An important assumption is that the communities served by the project have a clearly established communal organization. This is, in fact, not so clear in many communities at present, due to the severe socioeconomic deterioration existing there. However, we can assume that the fact that the agencies have been working permanently with these communities has made it possible for their community organization to become stronger.

CHAPTER IV

EVALUATION OF THE PROJECT EXECUTED BY CARE-PERU

This chapter contains a summary of the results of the project activities, the goal coverage, and an analysis of the Project's financial, administrative, economic and social aspects.

1. GOALS AND RESULTS

Table IV-1 is the consolidated chart of the goals planned and executed, indicating the percentage of progress achieved in each of the activities. It gives a complete view of the project achievements, thereby showing the degree of efficiency in project management and indicating any failures to comply with project objectives.

1.1 TECHNICAL ASPECTS

Revolving loan funds were formed and consolidated in the 95 operational units (communities) participating in the Emergency Project; 137.5 hectares were sown with potatoes, and 193 hectares with grain barley, making a total of 330.5 hectares of crops for home consumption, plus 196.5 hectares of oats for fodder. Pasture crops (alfalfa and Dactylis) were planted on only 15.25 hectares of the total 300 hectares planned.

Sixty-five veterinary modules, comprising basic veterinary equipment and medicine were purchased and distributed to the 65 revolving loan funds of veterinary inputs which had actually been set up, of the 95 which had been planned.

All the barley, fodder oats, alfalfa and Dactylis seeds used by the project were good quality seeds. Forty per cent (40%) of the potato seed was of poor quality (in most cases the potatoes were attacked by fungal diseases, and in other cases they did not attain physiological maturity). The fertilizers, as well as the veterinary medicine and equipment, were of good quality and were well accepted in the communities, as we have learned from the project beneficiaries themselves.

The goal for seed acquisition was 275.43 mT. Only 254.49 mT were bought, which represents 92.4% goal achievement.

In the case of the fertilizers, 131.80 mT were purchased and distributed. CITOWET, which had not been planned, was also

TABLE IV-1
GOALS AND PROGRESS OF THE DROUGHT EMERGENCY PROJECT

EXECUTED BY : CARE-PERU
AGRICULTURAL CYCLE : 1992-1993

ACTIVITIES	UNIT	GOAL	EXECUTED	% PROGRESS
A. LOANED FUNDS	No.	95.000	95.00	100.00
B. ACQUISITION OF INPUTS	TM	275.433	254.49	92.40
Seed: Potato	TM	225.000	206.25	91.67
Barley	TM	24.000	23.16	96.50
Fodder Oats	TM	24.000	23.58	98.25
Alfalfa	TM	1.928	1.17	60.69
Dactylis	TM	0.505	0.33	65.54
C. FERTILIZERS	TM	287.600	131.80	45.83
Urea	TM	80.000	37.50	46.88
Superfos 24	TM	192.000	61.55	32.06
CP Potasio	TM	15.000	7.85	52.33
Nitrofoska A	TM	0.600	24.90	4150.00
D. OTHERS				
Citowet	Lts.		113.00	
Inoculant	Kgs.	950.000	151.80	15.98
E. ANIMAL HEALTH				
Medicine	Pqte.	95.000	65.00	68.42
Vet. Equipment	No.	95.000	65.00	68.42
F. CROPS SOWN				
Potato	Ha	150.000	137.50	91.67
Barley	Ha	200.000	193.00	96.50
Fodder Oats	Ha	200.000	196.50	98.25
Assoc. Pasture	Ha	300.000	15.25	5.08
SUB TOTAL	Ha	850.000	542.250	63.79
G. OTHER EVENTS			**	
Training	No.	475.000	470.00	98.95
Training	Part.		7169.00	

(**) raining in productive techniques and administration of the revolving loan fund, fondo comunal.

SOURCE : CARE/FUNO

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purchased, as it was indispensable for the potato crops. Less inoculant than planned was purchased: 151.8 kg., equivalent to 15.98% of the goal.

The animal health products purchased represented 68.42% of the goal. This was due to limitations in the market for the acquisition of the veterinary modules.

Of the total goal area (850 hectares), only 42.25 hectares were sown, representing 63.79%. This was because only 5.08% of the planned area for pasture crops was sown, due to adverse climate conditions.

The seeds were sown as follows: the potato seed was sown using a density of 1,500 kg/Ha; barley and fodder oats, 120 kg/Ha; and the associated pasture crops (alfalfa with Dactylis), 21 kg/Ha.

A total of 7,169 participants received training, including administrators of the revolving loan funds (promoters and community authorities) and the peasant farmers. The agricultural inputs benefited 5,132 families.

Both the technical assistance and training given by CARE-PUNO were acceptable, as confirmed by the people interviewed in the communities selected for the evaluation of the Project. Training was carried out at two levels: community leaders (3 participants) and project coordinators (2 participants), so that these persons would, in turn, replicate the training in their own communities.

Agricultural techniques incorporated into the project included the following: the setting up and administration of revolving loan funds for seeds, fertilizers and animal health products; soil conservation and the manuring of crops using combinations of farmyard manure and chemical fertilizers; the planting of crops in the areas of least climatic risk; pest control, disease control; and the selection and storage of products (tubercles and cereals).

The 93/93 agricultural cycle was conducted under adverse conditions (a short summer in February 1993 followed by frost and continual hailstorms) which affected the crop yields.

The potato production was below the recorded averages for the area, giving an average yield of 2.97 mT/hectare. The barley and oats were harvested as green fodder, with yields of 12 mT/Ha. (weight of green plant material). No production was recorded for the associated pasture crops, as they were

completely spoiled by the frost.

A large part of the potato production (60%) was found to be infested with Phytophthora infestans and some with bacterial diseases, which meant that the production was not of sufficiently high quality to be used as seed.

CARE-PUNO played its role well in organizing the communities through the community committees (95), and training them in the management and administration of the revolving loan funds. These goals were met thanks to a coordinated effort between CARE technicians and technicians from the micro-regions of Puno to provide permanent technical assistance and follow-up to the loan fund operations.

The animal health activities consisted of acquiring veterinary "modules" of basic equipment and medicine, and providing training for the use and administration of the veterinary inputs by the community committees themselves. The training was successfully directed, by a veterinary surgeon. The animal inoculation campaigns are being conducted as scheduled by the agency.

The Project was permanently monitored by the AID Monitor/Adviser, who performed the follow-up of all the activities indicated in the work plan. His monthly supervision reports record the progress made and the results to date. These reports contained specific observations on certain aspects, such as the quality of the potato seed, areas affected by frost, and recommendations to correct deviations from the Project.

Although the financial resources did not arrive in time for the sowing season (August-September), we can consider that good compliance was given to the work plan drawn up by the CARE-PUNO office, as regards the acquisition of agricultural and veterinary supplies (seeds, fertilizers, pesticides and animal health products), the installation of crops (potato, barley, fodder oats and associated pasture crops) and the training of beneficiary families, with a budget execution of US\$ 582,149, which is 78.4% of the expenditure capacity.

The control and administration of the revolving loan funds are governed by a set of regulations, which were duly distributed and discussed, to provide rules for the organizing of the loan funds. An interest rate of 20% of the production was fixed as a means of capitalizing the fund in each community, enabling the participants to purchase pesticides and fertilizers for future agricultural cycles.

1.2 FINANCIAL AND ADMINISTRATIVE ASPECTS

This executing agency showed technical solvency, good financial and administrative management and adequate supervisory work.

To meet with the stipulated requirements, the following system was used for the purchase of inputs: the agency first received quotations, then a technical report was written to justify the awarding of the contract, and finally the purchase contract was drawn up and signed.

CARE-Puno has had many years of experience managing similar projects, and this enabled them to handle and distribute the inputs properly. The distribution was effected rather late due to the delay in transferring the budget funds and the scarcity of seeds on the market as a result of the high demand.

The three last quarterly technical reports issued, corresponding to October-December 1992, January-March 1993 and April-June 1993 have been received and reviewed. They are clear, full reports. A delay in the completion of the project's financial reports has been detected: the financial report for the month of June was not received until September 9, 1993.

The AID Monitor/Adviser had a significant participation in the Project.

1.3 ECONOMIC ASPECTS

The estimated value of the first year's production is S/.292,740 (Soles). See Table IV-2.

Based on the results of the results of the 92/93 cycle, five-year estimates were made on a projection of this Project, to evaluate its feasibility over a period which will make it possible to measure its impact realistically.

Income estimates were based on the assumption that the production would increase moderately due to a growth in crop productivity and, to a lesser extent, due to an increase in the area under cultivation. It is also assumed that the prices will remain constant, equivalent to historic averages. See Table IV-3.

The projected expenses maintain a similar structure to those of the 92/93 cycle. The only change is in the participation

TABLE IV-2
ESTIMATED VALUE OF FIRST YEAR'S PRODUCTION
(SOLES)

EXECUTED BY : CARE-PUNO

MICRO REGION	POTATO			FODDER BARLE			FOODER OATS			VALUE
	AREA HAS	PRODU mT	VALUE S/.	AREA HAS	PRODU mT	VALUE S/.	AREA HAS	PRODU mT	VALUE S/.	TOTAL S/.
PUNO	27	55	33000	34.5	414	4140	36.5	438	4380	41520
ILAVE-JULI	27	105	63000	40.0	480	4800	40.0	480	4800	72600
JULIACA	29	74	44400	40.0	480	4800	40.0	480	4800	54000
CHUCUITO-YUNG	30	120	72000	39.5	474	4740	40.0	480	4800	81540
LAMPA	24.5	55	33500	39.0	468	4680	40.0	480	4800	43080
TOTAL	137.5	409	246000	193	2316	23160	196.5	2358	23580	292740

SOURCE : CARE-PUNO

NOTE:

In the case of the potato crop, 50% of the production is considered to be seed, at a price of S/. 860/mT and the remaining 50% is potato for consumption, at a price of S/. 350/mT. Estimated recovery of potato for seed was 120 mT.

In the case of the barley, the production of fodder obtained in the first year is priced at S/. 10/mT, in order to purchase seed for the following cycle with the product of the sale.

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TABLE IV - 3
 PRODUCTION PROJECTIONS
 C A R E

CROP	INDICATED	PUNO	
		1	5
POTATO	AREA	137.5	237.6
	PROD.	584.0	2138.0
	YIELD	4.3	9.0
BARLEY	AREA	193.0	333.0
	PROD.	77.0	495.0
	YIELD	0.4	1.5
FODDER OATS	AREA	196.0	407.0
	PROD.	1651.0	5512.0
	YIELD	8.4	13.5
PASTURE CROPS	AREA	15.0	38.0
	PROD.	107.0	661.0
	YIELD	7.0	17.4
TOTAL	AREA	541.5	1015.6
	PROD.	2419.0	8806.0
	YIELD	20.1	41.4

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of operational expenses, due to a considerable increase in the technical assistance costs, since the Project seeks to consolidate its technology transfer activities.

A first quantitative evaluation was therefore made, to measure the impacts of the Project's quantitative results, using profitability indicators. Two indicators were used: the cost/benefit ratio, and the internal rate of return. The former was considered the principal means of evaluating the effectiveness of goal achievement, since it is more accurate for this type of project.

The IRR is analyzed for reference only. In projects like this, which are mainly to help the beneficiaries to build up a working capital, this is not an indicator which gives homogeneous values, and therefore it is not possible to establish a very reliable consolidated indicator per institution.

These indicators were calculated for three stages of the Project. The first ratio established was the ratio of benefits obtained from the agricultural cycle versus investments made, in order to evaluate the direct effect of the initial funding. The second calculation was of the same ratio, but for the first projection period. The third referred to the evaluation of the five years projected.

In each case, the payment of labor is considered within the costs item. Although it is not a cash expenditure, it is a real value to be assumed in order to attain the benefits of the Project.

The results obtained for the whole Project on the basis of these indicators are:

For the 92/93 cycle:	292740/552800	: 0.53
For the first year projected:	474706/560748	: 0.85
For the five years projected:	3549774/3252190	: 1.09

This indicates that for the 92/93 cycle, the Project had a very low result (for each Sol invested, the beneficiary communities obtained only 50 centimos). See Table IV-3A.

The coefficient calculated for the first project year shows an increase over the previous indicator, in spite of the fact that in the costs, technical assistance and management expenditure were increased to reinforce the efforts made.

TABLE IV-3A

**INVESTMENT PER SPECIFIC CROP AND ANIMAL HEALTH
(IN SOLES)**

EXECUTED BY : CARE-PUNO

DESCRIPTION	HAS SOWN	UNIT PRICE S/.HA	COST OF CROP S/.
POTATO CROP			
Seed	137.50	1,303.80	179,272.50
Fertilizers	137.50	578.30	79,516.25
Other inputs	137.50	36.40	5,005.00
Labor	137.50	360.00	49,500.00
Operational Expenses			48,012.70
SUBTOTAL		2,278.50	361,308.45
BARLEY CROP			
Seed	193.00	52.15	10,064.95
Fertilizers	193.00	222.40	42,923.20
Labor	193.00	120.00	23,160.00
Operational Expenses			15,163.30
SUBTOTAL		394.55	91,311.45
FODDER OATS CROP			
Seed	196.50	52.15	10,247.48
Fertilizers	196.50	222.40	43,701.60
Labor	196.50	120.00	23,580.00
Operational Expenses			15,438.25
SUBTOTAL		394.55	92,967.33
ASSOC. PASTURE CROP			
Alfalfa seed	15.25	16.35	249.34
Dactylis seed	15.25	12.80	195.20
Fertilizers	15.25	254.10	3,875.03
Labor	15.25	120.00	1,830.00
Operational Expenses			1,065.00
SUBTOTAL		403.25	7,214.56
ANIMAL HEALTH (MOD)	65.00	3,997.50	259,837.50
BUDGET TOTAL INVESTMENT			812,637.29

SOURCE : CARE-PUNO

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The coefficient calculated for the five-year projection shows quite an acceptable result. The beneficiary recovers his investment, plus nine centimos which, although it is not a significant profit, enables him to avoid decapitalization of the activity and reinforces the positive indirect effects of the Project.

The above calculations are based on Table IV-4.

With regard to the internal rate of return, the result for the project executed by CARE is 18.15%, according to the following formula:

$$I_0 = \sum_{i=1}^n \frac{(B-C)}{(1+i)^i}$$

Where I_0 = Initial Project Investment
 $B-C$ = Project's Net Flow
 i = Internal Rate of Return
 n = Period

This indicator has a value higher than the cost of the capital (10%), a result which shows that the benefit of the Project is superior to any investment alternative generated in agriculture. This result is correct, since the Project under analysis is a project to make production more operational, where investments are turned into benefits very quickly (at the end of a cycle), whereas investment projects require a longer maturing period before the investment amount is recovered.

1.4 SOCIAL ASPECTS

Both the male and female members of the peasant communities participated actively in all the project-related activities, doing farm work and communal work, and attending the assembly meetings. The working habits and communal production experience traditional in the Quechua and Aymara zones of the Altiplano region, and the incentive provided by the fact that the project components offered were compatible with the productive system in these communities, were responsible for the remarkably participational attitude of the beneficiary population. (Table IV-1).

The community as an organized unit is well consolidated in the five microregions. The cohesive community organization can be explained as a response of the high Andean inhabitant to the climatic adversities which characterize this geographic area. The project contributed to enhancing the organizational aspect of the community and encouraged

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TABLE IV - 4
C A R E ECONOMIC PROJECTION

ITEM	Y E A R						PRESENT
	0	1	2	3	4	5	VALUE
BENEFIT(1)		474706	671296	936858	1295719	1569545	3549774
COSTS	560741	679685	808026	962036	999939		3252190
BALANCE	-560741	-204979	-136730	-25178	295780	1569545	297584

(1) 51.8% potato, 15.8% barley, 29.5% fodder oats.

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communal work, providing a viable alternative for the peasant farmer's response to ecological challenges. For example, crops were planted on communal land or family-owned fields, which were merged together to be tended jointly.

The way the Project was applied here responded to the interests, knowledge and strategies of the local peasants. The community Assembly set up its Emergency Committee, designated the committee members and made the decisions regarding the performing and monitoring of the various Project activities and the selection of the beneficiaries.

The Assembly gives the committee the authority to make decisions referring to project operations, and the Committee periodically informs the Assembly about its actions and activities. The committee thus obtains from the Assembly ratifications, amendments and suggestions from community members. The Committee's coordination with those in charge of the project was smooth at all times. Authorities and members say that they had a good working relationship.

The participating peasant families and, in particular, the community leaders, have become aware of the significance and scope of the revolving loan funds as a means of injecting capital into the community by administrating their own communal loan funds of seeds and other inputs for farming activities.

The beneficiary families' ready acceptance of the revolving loan fund was unanimous, as seen by the decisions recorded in community assembly meetings - an expression of the Altiplano peasant's strong vocation for solidarity. The participants also expressed their highly favorable opinion of the way the loan fund had been working as regards the allocation and recovery of the loans. They expressed their satisfaction that the revolving loan fund offered them greater security, and that the Project had enabled them to set up seed storehouses for the first time ever.

Almost all (93%) of the participants commented that not enough seeds had been distributed: they had not been able to sow all their cultivable land; and many needy families had not been able to benefit from the Project.

The socioeconomic condition of the Collao Altiplano region is one of subsistence peasant economies with extremely low real incomes. Among the factors responsible for this are: the limited material resources and limited technologies, the strong demographic pressure in the area and the high risk

posed by local ecological conditions, such as the recent persistent drought. Under these conditions, the productivity of farming activities is very low, and margins of profit for the peasant family are minimal or non-existent. Family incomes are too low even to cover their subsistence needs.

In this context, the implementation of the project in this area had a highly significant impact, producing a relative increase in the family income and a noticeable absorption of the peasant labor force. Community leaders stated that their production had increased and improved with the help of the project: 88% of those interviewed said that the quantity and quality of their harvests were better than in the previous year. Only 6% said that their harvests were not better than in previous years. Another 6%, from the Puno microregion, indicated that they had been unable to harvest any grain barley.

As more areas were being cultivated, there was an intensification of agricultural work, and consequently a greater absorption of the family and community labor force, which had been chronically unemployed. The increased work with livestock and the technical follow-up provided by the institution responsible for the project, contributed to this. All the participants (both men and women) said that there had been more people employed doing farm work in the community. Reciprocal work ("Ayni") and, in particular, the communal work days also required more labor.

Ninety per cent (90%) of the participants stated that their total family incomes were higher than those obtained in previous years, mainly as a result of the higher sales of their animal products: wool, meat, cheese, livestock; as well as their agricultural products: potato starch and potatoes. The commercial aptitude of the Altiplano peasant is remarkable, especially that of the women, who market the handicrafts they have knitted using the wool they have produced themselves.

The production obtained was mostly used for family consumption. Surplus production for sale was obtained by 55% of the participants interviewed, principally in the lakeside area and the micro-region of Lampa.

Eighty-seven percent (87%) of the participants stated that they had more food this year, thanks to the project. Another group, 7% of the interviewees, who were from the micro-region of Chucuito/Yunguyo, said that their food situation had improved slightly. The remaining 7% from the subregion of

Ilave/Juliaca said they had obtained the same amount of food as in previous years. These survey results would seem to indicate that the nutritional levels increased somewhat, although this behavior has been variable.

At this point, the importance of the "food for work" program should be mentioned. It enhanced the impact of the project in the communities, complementing the diet of the poorest inhabitants at the time when food was at its most scarce.

An important strategy adopted by the peasant families in response to the insufficiency of their farming incomes to cover their subsistence needs is that of the seasonal migration of family members. They seek paid employment in the biggest towns or cities of the region, or find agricultural work in the coastal or jungle region. The neediest peasants are the ones who migrate the most. These structural characteristics of the peasant economies are common in the southern Andean region, but are even more pronounced in the Altiplano, which is one of the country's most "population-expelling" areas.

Thus, 80% of the peasants interviewed in the five micro-regions migrated temporarily last year for varying periods of time (45% for 1 - 3 months and 30% for 3 - 10 months). When the project was applied in the 1992-93 agricultural cycle, it slowed the migratory trend noticeably. Less than 50% of those interviewed migrated this year, and only for periods of under two months. The migrants were male heads of families and, to a lesser extent, young men.

The higher income generated in the community, the availability of more food products, and greater employment of the family labor force in the communities, were effects of the Project which all combined to reduce the peasant migratory index this year.

It should be stressed that the economic benefits actually obtained by the peasants when they migrate are very small, enabling them merely to finance the reproduction of their subsistence economies. The peasants appreciate the effective contribution made by the Project in this respect, since it has provided an advantageous alternative to enable them to improve their economic situation.

The intensive and varied work performed by the peasant woman of the Altiplano region is seriously limited to the basic family level. Her scope and possibilities are restricted mainly by her illiteracy and lack of access to technical

training. Her role is that of a subordinate. These factors bar her from participating and contributing in community leadership and/or emergency committees; and, generally speaking, in any higher type of organization set up to carry out development activities in the communities. In only 10% of the communities visited was there any participation of women at leadership levels or on project committees, and even then their presence was minimal.

All the community members said that they had benefited from the project; the project had enabled them to obtain more food; it organized the revolving loan fund for them, which will guarantee a supply of seeds and other inputs; they learned better agricultural techniques; their community organization has been strengthened by the project and they "feel more united"; this year they have had more productive work in their community and very few people needed to leave the community looking for work.

All the beneficiaries expressed a positive opinion regarding the performance of the project conductors and extensionists, because they had given frequent assistance, checked the participants' work constantly and worked in a serious, responsible manner.

They repeatedly requested that a larger quantity of seeds of food crops and fodder crops be distributed so as to benefit more community members and make it possible to sow land which was not cultivated in this last cycle. They need bitter potato seed, to produce potato starch. They also request more training and technical assistance to help them improve their agricultural and livestock production. Another unanimous request was that the Project support be continued.

2. PROJECT EVALUATION

2.1 EVALUATION OF RESULTS

The following evaluation is based on a set of numerical indicators which seek to measure the effectiveness of the work carried out by the three offices responsible.

The indicators applied are:

- The cost/benefit ratio, described in point 1.3, which expresses the level of coverage of a project's costs.
- The investment/beneficiary ratio, which indicates the effort made by the project for each family served.

- The beneficiary/technician ratio, measuring the degree of coverage of one technician to assist the number of families specified.
- The hectares/beneficiary coefficient, indicating the degree of land per family.
- The hectares/technician coefficient, expressing the degree of coverage of a technician in technical assistance.
- The beneficiaries/committee coefficient, which seeks to evaluate the level of concentration of the revolving loan fund committees.
- The beneficiaries/trained personnel indicator, which enables us to analyze the effort to be made in order to replicate the knowledge acquired by each person attending a course.
- The area harvested/area sown ratio, which measures the degree of effectiveness in crop management.
- The total sales/committee ratio, indicating the degree of commercial turnover that the committees may have.
- The share of income in the investment, which measures the effort needed in order to obtain one unit of income.

The basic concept is that a one hundred per cent goal coverage does not necessarily mean that the objectives have been met, and it is therefore necessary to establish other means of defining the real degree of coverage of objectives or the distortions which prevent the goals being met.

QUANTITATIVE EVALUATION INDICATORS

Indicator	Result
- C/B Ratio: 92/93	0.53
Five years	1.09
- Investment/Beneficiary	88.46
- Beneficiary/Technician	855
- Hectares/Technician	87.8
- Hectares/Beneficiary	0.1
- Beneficiaries/Committee	54
- Beneficiaries/Trained Personnel	0.71
- Area Harvested/Area Sown	0.620
- Total Sales/Committee	3,081
- Share of Income in Investment:	
Total	1.55
Potato sales	0.68
Barley sales	0.06
F. Oats sales	0.81

In many cases, these results give indices contrary to positive Project achievements, and in some cases they give warning signs of dangers which can affect the functioning of the Project in the future.

The C/B coefficient gives an acceptable result for: the 92/93 cycle and for the five year projection, which means that the Project will at least maintain the capitalization level of the different productive activities; while the indirect effects (soil recovery, better use of inputs, organization of producers, etc.) are those which determine the greater benefits.

The second coefficient (Investment/Beneficiary) gives a very low value, a contribution of only 90 Soles per family served. This indicates either that the effort made is being diluted too much, or that the Project is failing to attend to families in order to reach specific goals.

The coefficient of beneficiaries per technician gives a

moderate sign of proportionality regarding the degree of coverage of the Project: 855 families per technician means that if an adequate program for the training of promoters is established, it will be possible to attend to the whole beneficiary population.

With regard to the hectares/technician coefficient, this indicator is complementary to the previous one and also expresses a good ratio of attention if each technician had to supervise the crops (88 hectares); the attention density would improve substantially if the work were done with a team of promoters.

The hectares/beneficiary coefficient indicates a serious development problem for the area. The fact that each family has only 0.1 hectares means that it will be impossible to improve the crop productivity, however much technical or financial aid is given.

The average number of beneficiaries served by a committee is 54, which means that each committee can be adequately handled with a minimal amount of organization to control this number of users.

With regard to the effort made by each trained person to teach what he has learned in the community the value is very good (0.7 families). This means that the training work has been adequate and there has been no difficulty in reaching the whole beneficiary population.

Coverage of the area harvested can be considered below acceptable limits in other crops. This is the result of the various problems encountered during the course of the Project.

Potential sales per committee indicate that there would not be any difficulty in carrying out a financial management system to be set up for these sums (over three thousand Soles).

Finally, the share of sales in the investment indicates that if, on average, an investment of 1.55 soles is needed to obtain an income of one Sol, the share of the different crops in that investment is as follows: potato, 68 centimos; barley, 6 centimos; and oats, 81 centimos. This result indicates that the crop which is the most investment-efficient is fodder oats, followed by potatoes, and in a distant third place, barley.

2.2 EVALUATION OF PROJECT EFFICIENCY

This section seeks to measure the impact of the Project, based on the criteria set down in the earlier chapter on the evaluation methodology.

This evaluation will be based on the following indicators:

- Management of Objectives and Policies
- Permanent Analysis of the Environment
- Planning and Defining of Priorities
- Organization of Follow-up and Evaluation
- Adaptation of the Organizational Structure
- Institutional Coordination
- Internal Work Dynamics
- Effectiveness of Action
- Strategic Management
- Relationship with Beneficiaries
- Systematization of Experience
- Transferral of Results
- Replicability of Work.

With regard to the first point, this agency managed the objectives well, as shown by the coherence of its actions in relation to the Project goals and the strategic management of its resources.

For example, goals were never overshot, and they were at all times within adequate margins; unlike other offices, which went beyond budgeted amounts for purchases of certain items or increased the scope of their attention to beneficiaries.

However, occurrences like the purchase of bad seed indicate the failure to lay down clear rules for handling situations such as a limitation in seed acquisition, since this could not have been due to technical deficiency.

The agency performed a permanent analysis of the project environment, and took corrective measures whenever necessary.

With regard to the planning and defining of priorities, this was handled well. The field evaluation showed that the work was carried out according to well-structured plans, with specific plans for meeting the various goals. The Monitor made a significant contribution to the planning, reinforcing the agency's capacity.

Generally speaking, the follow-up and evaluation were well organized. The main purpose of this activity was to verify goal achievement, but it was also to see whether the methods being used were the most appropriate.

The adaptability of the organization was a very positive point in the execution of this Project. The agency established suitable work systems, developed from past experience, which enabled them to meet many of the goals as a result of good planning and also thanks to their organization and the responsible attitude of their personnel.

Institutional coordination was also a positive factor in this Project. CARE made use of its contacts and channels of coordination with other institutions, to extend its serving capacity, integrate all efforts and improve coverage levels.

With regard to internal work dynamics, one of the factors which made it possible for the Project to achieve a better yield was evidently the capability of the human resources involved in the work.

Effectiveness of action: the foregoing points presented a series of indicators expressing good coverage of goals, both quantitative and qualitative, thereby defining the degree of effectiveness of the work carried out.

Strategic management became apparent when it was necessary to find solutions to specific problems. Thus, although the funds were received late, the response achieved was quite good; and it was only due to climatic factors or the bad seed purchase that satisfactory levels of production were not attained.

The agency's relationship with the beneficiaries was favorable to the Project. CARE's experience in the area, and its permanent contact with the communities (technicians who live in the peasant communities) were an important factor for optimum goal achievement, especially regarding technology

transfer.

A general conclusion is that although the quantitative results were not the best possible, the qualitative analysis of the work done by CARE-PERU's office indicates a more homogeneous work, focusing on the set objectives and on compliance with detailed plans, and taking advantage of the area's external factors.

3. CONCLUSIONS AND RECOMMENDATIONS

3.1 CONCLUSIONS

The evaluation carried out has made it possible to identify the following results of the project execution, grouped according to the evaluation criteria applied:

a) Technical Aspects

- Food crops (potato and barley) were sown on 330.5 hectares and pasture crops on 211.75 hectares.
- The experience of the professionals conducting the PN45 Program was used to identify and select communities located at different ecological levels, and the resulting harvests were: Potato - 409 mT, with a yield of 2,975 kg/Ha; Barley and oats (weight of green plant material) - 4,674 mT of fodder harvested, with yields of up to 12,000 kg/Ha.
- Sixty-five (65) veterinary modules were purchased and distributed.
- Training was given to 7,169 loan fund beneficiaries.
- A total of 95 revolving loan funds were organized and set in motion in five micro-regions of the Department of Puno (Puno, Ilave-Juli, Juliaca, Chucuito-Yunguyo and Lampa), to benefit 5,132 impoverished families.

b) Financial and Administrative Aspects

- With its good organization, adequate administration and supervision of all the project activities, CARE-Puno was able to comply with the majority of the objectives.
- This agency has a good staff of professionals at all levels, which was a key factor for the success of the

Project, although there were few of them in comparison with the total number of beneficiaries.

- Administrative management was adequate in all respects, including the purchasing procedures. However, for the month of June there is a balance to be spent of about US\$163,851. See Table IV-5.
- Inputs were handled adequately and transported and distributed opportunely.
- Plans, work schedules, progress reports and financial reports were handled satisfactorily.
- The Monitor/Adviser made a good contribution in these aspects.

c) Economic Aspects

- The potato crop is the one which demands the highest investment per unit of area, both in absolute values and per hectare.
- The estimated value of the first year's production is S/.292,740 (Soles); 84% of this value is concentrated in the potato harvest.
- The crops assigned to the project were selected according to social criteria as well as economic criteria.

d) Social Aspects

- The participation of the beneficiary peasants was total and effective, in field labors and other Project-related activities. This cooperational attitude is a consequence of the beneficiaries' perception of the significance and scope of the Project for their present and future development.
- Execution of the Project reinforced the community as an organized unit, and the communities assimilated the introduction and operation of the Project emergency committees. These committees did their work well, with the support and assistance of the extensionists. Coordination with the project conductors was smooth and fluent.
- The revolving loan funds, as offered by the Project,

TABLE IV-5

BUDGET EXECUTION - DROUGHT EMERGENCY PROJECT
(U.S.DOLLARS)

EXECUTED BY: CARE-PUNO

ACCOUNT	BUDGET APPROVED DEC. 10,92	ACCUMU EXPENSE JUNE 93	BALANC JUNE 93	TO BE EXECUTE %
a. Seeds	265370	137504	127868	48.18%
b. Fertilizers	120337	95124	25213	20.95%
c. Transportation	22700	2064	20636	90.91%
d. Animal Health	45000	144848	-99648	
e. Technical Assistance	37000	37342	-342	
f. Operational Costs	39400	30095	9305	23.62%
g. Administrative Expenses				
- Container and Packaging	6000	741	5259	87.65%
- Costs Puno	16500	15481	1019	6.18%
- Costs Lima	7500	7380	120	1.60%
- Others	2000	1570	430	21.50%
h. Food Transportation	121502	57509	63993	52.67%
i. I.C.R.	52691	52691	0	0.00%
J. Auditing	10000		10000	100.00%
TOTAL U.S. \$	746000	582149	163851	21.96%

SOURCE : CARE-PUNO

BEST AVAILABLE DOCUMENT

were viewed favorably and very well accepted by the peasant communities. The system offered as a communal fund for the allocation and repayment of loans and capitalization was compatible with the communal productive methods and working habits traditional in the area. However, the consensus among the beneficiaries was that the seed should be provided in sufficient quantities to benefit a larger number of peasant families and to sow more extensive areas of land.

- The family income in the beneficiary communities showed a relative increase, most perceptible in the lakeside ecological zone and in some parts of the micro-region of Lampa, in the measure in which the agricultural cycle and animal farming activities, with Project support, generated a certain amount of surplus production which was sold.
- The Project had a direct impact on migratory trends. There was a decrease in the number of migrants and the length of time spent away from their communities. It is estimated that the months-man of temporary migration dropped by 70% from the previous year's level.
- The women played an outstanding role in the execution of the different Project activities. The workload of the peasant women, as a productive and reproductive force in the community, increased with the introduction of the Project. However, their participation at the leadership level or in administrative tasks was limited. This situation is linked with their limited cultural level and lack of access to technical training.
- The beneficiaries' approval and recognition of the Project's contributions and results were unanimous. They viewed the Project as aid given at a difficult time, to make inputs available again; and as an option which was within their reach to help them improve their production, capitalize, have productive work in their own communities and improve their food consumption. They were also unanimous in considering that it was important for the communities to continue receiving the support of the Project.
- The Emergency Project executed in Puno mitigated the negative socioeconomic situation caused by the drought, and rehabilitated the peasants' productive capacity, by attaching greater importance to the organization and operation of the revolving loan fund, making a financial

contribution for it to be set up and training the beneficiaries in production and administration techniques. A foundation has thus been laid for the continuation of socioeconomic development activities in the same communities.

3.2 RECOMMENDATIONS

a) Technical Aspects

- The methodology employed in the execution of this Project is worth saving, systematizing and ratifying for application in future emergency programs.
- Agriculture and livestock development projects should be formulated to complement and consolidate the development activities that have begun with the revolving loan funds, to give continuity to the 95 communal loan funds implemented in the area.
- A follow-up system should be designed, so as not to waste the organizational spirit fomented by the revolving loan funds in each of the beneficiary communities, but rather to systematize the processes of capitalization, crop yields and production costs.
- Training should continue to be given in seed quality control, the control of pests and diseases affecting the crops, and animal health.

b) Financial and Administrative Aspects

- More funding should be provided for technical assistance, since this a key element for the development of the peasant producer.

c) Economic Aspects

- The communities should continue to receive support through a duly structured technical assistance and training program, in order not to lose the significant achievements of this Project.
- Experiences in several communities of other Departments visited indicate that it would be recommendable to complement the program of support to communities in the form of agricultural inputs with a "food for work" program. The two programs complement each other well.

- Each financial program should have permanent professional personnel for the respective monitoring. This Project has shown that opportune advice leads to better goal achievement results.
- Technical and economic alternatives to solve the beneficiaries' land ownership problems should be evaluated.

d) Social Aspects

- The achievements of the Emergency Project will stagnate unless a regular program is applied to stabilize and consolidate the socioeconomic development goals. In this respect, the following actions are recommended:
 - * Intensify training in aspects of agriculture and livestock farming and administrative management, in keeping with the material and cultural conditions of the area.
 - * Motivate, implement and assist the communities in their organization and productive and administrative activities, in harmony with their organizational experience.
 - * Plan and execute development alternatives for communities or groups of communities using the human resources belonging to these communities, with all their skills and aptitudes.
- A professional in the field of social sciences should be included in the technical team carrying out development programs. The follow-up and supervision of the Emergency Project by the Monitors/Advisers proved to be an important function, which should be maintained.

CHAPTER V

EVALUATION OF THE PROJECT EXECUTED BY ADRA/OFASA

This chapter presents a summary of the evaluation of the "Agricultural Production Support Project in Drought-Affected Areas" executed by ADRA/OFASA's Northern, Southern, Southeastern and Central Regional Offices.

1. GOALS AND RESULTS

Table V-1 gives a complete view of each of the goals and the degree of progress made toward each goal (indicating the efficiency of the project management and any failures to comply with project objectives). The table contains the pertinent information for each of the Regional Offices as well as the consolidated results for ADRA-OFASA. The information is analyzed in the section on technical aspects of the project.

1.1 TECHNICAL ASPECTS

The cereal and pulse seeds acquired by ADRA/OFASA (corn, wheat, barley, peas, broad beans) were of guaranteed quality. This was not true of the potato seed: due to problems in the supply of certified seed, only 40% of the potato seed purchased was of this type. Sixty per cent (60%) of the seed used was not certified, and was not of high enough quality or healthy enough to guarantee the planned yields.

Table V-1 shows that the agency purchased 8.77% more seeds than planned. However, for various different reasons, they were unable to distribute 51.51 mT of the seeds. At the time of our visit, these seeds were stored in ADRA/OFASA's regional storehouses.

The chemical fertilizers bought were principally urea and diammonium phosphate, and a smaller amount of potassium chloride. The total acquired surpassed the planned goal by 112.93%. Distribution was 49.08% of the planned amount.

The tools and agricultural equipment purchased (shovels, picks, spades, fumigation backpacks) were of guaranteed quality, suitable for the project areas. Of the 7,450 sets purchased, only 1,588 were distributed (21.32%), but it is expected to complete this activity in September.

In the Department of Puno, a well-drilling program was implemented. Equipment and machinery were acquired to drill

TABLE V-1
 CONSOLIDATED GOALS AND PROGRESS OF THE PRINCIPAL ACTIVITIES
 OF THE AGRICULTURAL PRODUCTION SUPPORT PROJECT IN DROUGHT-AFFECTED AREAS

BEST AVAILABLE DOCUMENT

EXECUTED BY : ADRA/DFASA
 AGRICULTURAL CYCLE : 1992-1993

ACTIVITIES	UNIT	CENTRAL REGION			4. REGION SANTA CRUZ-CAJAMARCA			5. REGION AREQUIPA			6. REGION JULIACA			ADRA/DFASA		
		GOAL	EXEC.	% PROGRESS	GOAL	EXEC.	% PROGRESS	GOAL	EXEC.	% PROGRESS	GOAL	EXEC.	% PROGRESS	GOAL	EXEC.	% PROGRESS
.RECONNAISS. OF COMMUNITIES	NO	27	37	137.84	18	18	100.00	18	18	100.00	18	18	100.00	57	67	117.54
.ORGAN. OF REVOLV. LOAN FUNDS	COMMITTEE	27	37	137.84	18	18	100.00	18	7	98.00	18	13	100.00	57	66	115.77
.RECONN. OF PLOTS	Ha	335.00	335.00	100.00	150.00	213.75	142.50	150.00	135.00	90.00	150.00	150.00	100.00	785	833.75	106.21
.ACQUISITION OF INPUTS																
4.1 SEEDS	mT	358.20	388.24	108.39	168.98	155.45	95.61	168.88	157.56	93.48	161.88	212.52	132.00	848.1	713.77	186.77
4.2 FERTILIZERS	mT	165.53	577.82	348.59	76.88	86.78	114.34	75.88	56.28	73.95	56.88	95.52	146.24	383.53	816.64	212.93
.DISTRIBUTION OF INPUTS																
SEEDS: Potato	mT	376.58	376.58	100.00	158.88	158.88	100.00	147.46	147.45	100.00	158.88	158.88	100.00	826.94	826.84	100.00
Corn	mT	3.15	3.15	100.00	1.88	1.88	100.00							4.15	4.15	100.00
Broad Bean	mT	7.87	7.87	100.00				8.18	8.18		5.88	5.88	100.00	12.17	12.17	100.00
Pea	mT	1.45	1.45	100.00	4.45	4.45	100.00							5.9	5.9	100.00
Barley	mT							3.88	8.88	100.00	6.88	6.88	100.00	14	14	100.00
FERTILIZERS	mT	577.82	161.35	27.96	36.78	86.77	99.76	56.28	56.28	100.00	76.52	76.52	100.00	816.72	488.84	49.28
.CROPS SOWN																
.POTATO																
Sown	Ha	214.88	229.77	107.37	188.88	142.75	142.75	188.88	99.53	99.53	188.88	188.88	100.00	514	572.85	111.27
Harvested	mT	2148.88	884.35	37.59	1888.88	132.98	18.29	1888.88	446.76	44.78	1888.88	451.46	45.15	5148	1885.67	36.67
.CORN																
Sown	Ha	65.88	41.62	64.83	38.88	28.58	63.33							95	62.12	65.37
Harvested	mT	45.88			45.88	26.28	58.22							78	26.2	29.11
.BROAD BEANS																
Sown	Ha	57.68	53.5	92.88					8.58		28.88	28.88	100.00	77.6	74	75.76
Harvested	mT	61.88	1.8	2.95							28.88			81	1.8	2.22
.PEAS																
Sown	Ha	34.88	12.63	37.15	28.88	58.58	252.58							54	63.13	116.91
Harvested	mT		1.73		14.88	6.88	42.86							14	7.73	55.21
.BARLEY																
Sown	Ha							58.88	48.88	88.88	38.88	38.88	100.00	88	78	87.58
Harvested	mT							58.88	29.89	59.78	38.88			88	29.89	37.36
.TECHNICAL ASSISTANCE																
Training of promoters	NO	31	41	132.26	18	18	100.00	18	16	168.88	18	18	100.00	61	77	126.23
Classes for promoters																
a) Functions of the promoter	Class	6	7	116.67	2	2	100.00	5	6	120.00	3	3	100.00	16	18	112.50
b) Org. of Loan Funds	Class	16	11	68.75	2	2	100.00	5	6	120.00	18	18	100.00	33	29	87.88
c) How to sow: Potato	Class	37	38	102.78	1	1	100.00	3	3	100.00	3	3	100.00	44	45	102.27
Corn and Barley	Class				1	1	100.00	1	2	200.00				2	3	150.00
Peas	Class															
Broad beans	Class				2	2	100.00							2	2	100.00
f) Fertilization	Class	7	8	114.29	1	2	200.00	2	3	150.00	3	3	100.00	13	16	123.88
e) Cultivation	Class	15	13	86.67	3	5	166.67	5	6	120.00	5	5	100.00	28	29	103.57
Demonstration of Methods																
a) Sowing: Potato	Event	97	97	100.00	9	9	100.00	18	9	78.88	18	18	100.00	126	125	99.21
Corn and Barley	Event	35	34	97.14	3	6	200.00	18	7	78.88	18	18	100.00	58	57	93.28
Peas and Broad beans	Event	67	67	100.00	18	18	100.00							77	77	100.00
b) Hilling up and weeding: Potato	Event	27	27	100.00	7	12	133.33	18	7	78.88	18	18	100.00	56	58	103.57
c) Hilling up and weeding: Corn	Event	27	27	100.00	3	3	100.00							48	48	100.00
d) Fertilizing potato crops	Event	27	27	100.00	7	7	100.00	18	7	78.88	18	18	100.00	56	56	100.00
e) Selecting pea seeds	Event	27	27	100.00	18	3	38.88							47	48	102.11
f) Selecting corn seeds	Event	27	27	100.00	3									48	37	72.58
Storing potatoes	Event	27	27	100.00	7	7	100.00	18						56	46	82.14
Visits to fields	Visit	1954	1483	75.98	518	648	125.49	1422	978	78.71	648	648	100.00	4524	3753	83.37
.Leaflets																
Integrated Pest Control		1588			588			1522						3578		
How to select Potato Seeds		1588			588			1588						3588		
How to select Corn Seeds		1588			588									2288		
Crop Diversification		1588			588									2888		
.DISTRIBUTION OF TOOLS	Set	3888	478	15.67	1588	473	32.87	1588			1458	625	43.18	7452	1588	21.32
.COMMUNITIES	N°	27	37	137.84	18	18	100.00	18	18	100.00	18	18	100.00	57	67	117.54
.N° OF BENEFICIARIES	Family	4858	5346	132	1588	1431	93.75	1528	1588	100.00	1588	1457	97.27	3558	7786	114.46
.INSTALLATION OF WELLS:																
.Drilling											58	17	34.88	58	17	34.88
.Equipping											58	18	28.88	58	18	28.88

fifty (50) wells to provide water for domestic consumption, irrigation of vegetable gardens and the making of adobe bricks. The average yield is 2,500 liters/hour. At the time of our visit, 17 wells were working. The rest are expected to be completed by the end of September.

Crops are dry-farmed in some parts of the Project area and have access to irrigation in other parts. To contribute to the agricultural development and motivate the peasant farmers to cultivate their crops with irrigation, ADRA/OFASA gave impulse to programs for the maintenance and improvement of irrigation infrastructure. A specific example is in the District of Chivay, Department of Arequipa, where food products were given to the beneficiaries who worked on the maintenance of the irrigation infrastructure for the potato and barley crops.

During the 92/93 agricultural cycle, the climatic conditions were adverse for agriculture, resulting in a 33% loss of the cultivated area. The broad beans were the most severely affected crop.

Technical assistance and technology transfer were provided sporadically by ADRA/OFASA's regional offices, with the exception of the Central Region Office. Technical assistance is given by the agency's professional personnel, with the support of specialists from the Ministry of Agriculture and the universities.

The training was given to the members of the emergency committees and to agricultural promoters. In the period under analysis, 66 emergency committees and 77 agricultural promoters were trained in aspects of organization, administration and operation of revolving loan funds; in crop management; selection techniques; and the storage and treatment of products. The results of the training can be seen in the farmers' use of certified seeds, chemical fertilizers, and traditional techniques, such as the use of muña (Mintostachis glabrescens) as repellent for the potato moth (Phthorimaea operculella), and modern technology as in Puno, where the potato seed is being stored in storehouses with diffused light.

Help was provided for processing the potatoes to produce potato starch and dried potato, as a means of eliminating the problem of the production being concentrated in periods when the price of the product is at its lowest. The processing gives the product a higher aggregate value, and at the same time generates employment in these rural areas.

ADRA/OFASA drew up a set of regulations to govern the system of the revolving loan funds, for application in all the regional offices. The loan funds are managed by ADRA/OFASA's regional offices, the objective being to use the value of the seeds repaid to the fund to purchase other inputs and even to finance technical assistance and training. Table V-2 shows the repayments made to the revolving loan funds.

The AID Advisers responsible for monitoring the Project were present at all times in ADRA/OFASA's regional offices. They wrote reports on their follow-up visits, containing their comments on aspects of the project execution and, whenever necessary, recommendations to remedy any deficiencies detected in technical or administrative areas. They participated in drawing up the work plans, formulating training programs and performing quality control of the seeds.

1.2 FINANCIAL AND ADMINISTRATIVE ASPECTS

The Southern and Southeastern Regional Offices organized, administrated and supervised all the project activities adequately, while in the Northern Regional Office the administration and supervision of the project were deficient. The Zonal Office for Huancayo delayed sending the inputs to Huanta and there was discontinuity in their supervision of the project activities in Huanta.

The transportation, storage and distribution of the inputs were properly managed by the Northern, Southern and Southeastern Regional Offices. This was not true of the Huancayo Zonal Office where the delay in sending the already acquired potato, corn and broad bean seeds to Huanta was partly responsible for the total loss of the corn and broad bean production in that area.

The AID Monitor/Adviser assisted all four regional offices with their work plans and schedules and financial progress reports.

1.3 ECONOMIC ASPECTS

The total investment of the four regional offices amounted to S/. 1'132,556.16 (Soles) as of August 31, 1993. The main component was the acquisition of inputs. See Table V-3.

The total production obtained with Project financing in the 92/93 agricultural cycle amounted to 1,951.29 mT, with an in-field sales value of S/. 669,466.00 (Soles). See Table V-4.

TABLE V-2
 PRODUCTION AND LOAN FUND
 RECOVERY-CONSOLIDATED

BEST AVAILABLE DOCUMENT

(in mT)

EXECUTED BY : ADRA/DFASA

CROP		Unit	ADRA/DFASA NORTH REGION	ADRA/DFASA SOUTH REGION	ADRA/DFASA SE-REGION	ADRA/DFASA CENTRAL REGION	TOTAL ADRA/DFASA
POTATO	HARVESTED	mT	182.90	446.96	451.46	804.35	1885.67
	RECOVERED	mT	54.80	156.45	156.01	342.56	709.82
PEAS	HARVESTED	mT	6.00			1.73	7.73
	RECOVERED	mT	1.96			0.67	2.63
CORN	HARVESTED	mT	26.20				26.20
	RECOVERED	mT	7.96				7.96
BARLEY	HARVESTED	mT		29.89			29.89
	RECOVERED	mT		10.46			10.46
BROAD BEANS	HARVESTED	mT				1.80	1.80
	RECOVERED	mT				0.72	0.72
TOTAL	HARVESTED	mT	215.10	476.85	451.46	807.88	1951.29
	RECOVERED	mT	64.72	166.91	156.01	343.95	731.59

SOURCE: Consultant Group

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TABLE V-3

BUDGET EXECUTION OF PROJECT AS OF AUG. 31, 73

CONSOLIDATED

(SOLES)

EXECUTED BY : ABRA / OFASA

COST ELEMENT	NORTHERN REGION SANTA CRUZ-CAJAMARCA		SOUTHERN REGION AREQUIPA		SOUTHEASTERN REGION JULIACA		CENTRAL REGION CENTRO		TOTAL ABRA/OFASA	
	AMOUNT		AMOUNT		AMOUNT		AMOUNT		AMOUNT	
	TRANSF.	EXECUTED	TRANSF.	EXECUTED	TRANSF.	EXECUTED	TRANSF.	EXECUTED	TRANSF.	EXECUTED
A.- SEEDS										
POTATO		116365.50		97900.50	150355.00	162800.40		259800.00		636946.40
CORN		2370.00						17760.00		20130.00
PEAS		5197.20								5197.20
BARLEY				8000.00	9100.00	2400.00			9100.00	11200.00
BROAD BEANS					7497.00	3000.00		19359.00	7497.00	22356.00
TOTAL SEEDS	174220.75	123932.70	174220.00	106700.50	175032.00	168200.40	336370.50	296919.00	859859.25	625932.60
B.- FERTILIZERS										
UREA		20003.36		23960.00		20225.36		47620.00		114216.72
DIAMONIUM PHOSPHATE		20030.00		1552.20						21582.20
POTASSIUM CHLORIDE		7345.00		9407.00		8092.04		16463.04		42107.04
EARTHWORM HUMUS		726.37				400.00				1206.37
PHOSPHATE TRIPLE				16307.92		6929.00				23236.92
SUPER PHOSPHATE						15055.07		35721.00		50776.07
GUANO						14353.00				14353.00
2d. REMITTANCE					21316.00				21316.00	
TOTAL FERTILIZERS	40104.73	40104.73	40104.73	51307.12	63317.21	60936.07	94350.51	99812.04	253077.10	268159.96
C.- TRANSPORTATION	7956.00	204.37	5200.00	3015.02	0951.00	6029.00	15912.00	14651.20	30019.00	25500.47
D.- SUPERV. AND ADMIN.										
WAGES	6586.65	0772.64	6586.65	7440.04	7734.00	7607.92	1317.30	10897.50	22225.40	42726.10
TRAVEL	1606.50	4133.66			1005.10	2203.50	4104.99	7056.05	7596.59	14273.29
ADMININ. EXP.	3673.53	1225.50	3673.53	5605.40	3003.42	5264.30	4157.01	6507.53	15307.49	10632.09
MONITORING AND EVAL.		249.39	1606.50	3041.03		230.70			1606.50	4321.92
TOTAL SUP./ADM. EXP.	11066.68	14301.27	11066.68	16975.35	13423.40	15306.50	9579.30	33261.16	46736.06	00004.20
HAND TOOLS		1623.33						761.94		2305.27
WELL DRILLING					100962.45	54592.92			100962.45	54592.92
TECHNICAL ASSISTANCE		440.64		1533.06	6535.00			4026.96	6535.00	0000.66
TOTAL	242156.16	100767.04	239399.41	100331.05	376221.06	314024.09	456212.31	449432.30	1313900.94	1132556.16

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TABLE V-4

ESTIMATED VALUE OF FIRST CYCLE

ADRA/OFASA-CONSOLIDATED

(IN SOLES)

EXECUTED BY : ADRA / OFASA

EXECUTING AGENCY	AREA SOWN (Ha)		AREA HARVESTED (Ha)		PRODUCTION (MT)		VALUE (S/.)		
	FOR CONSUMPTION	FOR FODDER	FOR CONSUMPTION	FOR FODDER	FOR CONSUMPTION	FOR FODDER	FOR CONSUMPTION	FOR FODDER	TOTAL
NORTHERN REGION	213.75		187.58		215.18		67756		67756
SOUTHERN REGION	148.83		139.53		476.85		165410		165410
SOUTHEASTERN REGION	158.88		188.88		451.46		233288		233288
CENTRAL REGION	337.52		288.69		887.88		283826		283826
TOTAL	841.38		547.72		1951.29		669466		669466

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Based on the observation that the poor quality of the seed was to a large extent responsible for the low yields in the 92/93 agricultural cycle, we recommend that a communal seed nursery be set up in each of the areas, to provide the peasant farmers with good quality seed. For the effects of the analysis of the revolving stock of inputs, the same land area is maintained as in the 93/94 cycle, with 10% increases for the following years. The coming years are expected to show increased yields, thanks to the use of improved seeds, fertilizers and better methods of cultivation.

Based on the results of the 92/93 agricultural cycle, five-year estimates were made on a projection of this project, to evaluate its feasibility over a period which will make it possible to measure its impact realistically.

Income estimates were based on the assumption that the production would increase moderately due to a growth in crop productivity and, to a lesser extent, due to an increase in the area under cultivation. It is also assumed that the prices will remain constant, equivalent to historic averages.

The projected expenditure maintains a similar structure to that of the 92/93 cycle. The only change is in the participation of operational expenses, due to a considerable increase in the technical assistance costs, since the Project seeks to consolidate the technology transfer activities.

A first quantitative evaluation was therefore made, to measure the impacts of the Project's quantitative results, using profitability indicators. Two indicators were used: the cost/benefit ratio, and the internal rate of return. The former was considered the principal means of evaluating the effectiveness of goal achievement, since it is a more accurate method for this type of project.

The IRR is analyzed for reference only. In projects like this, which are mainly to help the beneficiaries to build up a working capital, this is not an indicator which gives homogeneous values, and therefore it is not possible to establish a very reliable consolidated indicator per institution.

These indicators were calculated for three stages of the Project. The first ratio established was the ratio of benefits obtained from the agricultural cycle versus investments made, in order to evaluate the direct effect of the initial funding. The second calculation was of the same ratio, but for the first projection period. The third

referred to the evaluation of the five years projected.

In each case, the payment of labor is considered within the costs item. Although it is not a cash expenditure, it is a real value to be assumed in order to attain the benefits of the Project.

The results obtained for the whole Project on the basis of these indicators are:

For the 92/93 cycle:	669466/1316055	: 0.51
For the first year projected:	1622293/1642267	: 0.99
For the five years projected:	9314801/8349842	: 1.12

This indicates that for the 92/93 cycle, the Project had a deficient result (for each Sol invested, the beneficiary communities only obtained 51 céntimos). However, this result is biased, insofar as the indicators for the Central Region and for Cajamarca are considerably lower (0.35 and 0.27 respectively); the structure of this index will be analyzed in further detail below. These calculations are based on Tables V-5 and V-6.

With regard to the internal rate of return, the formula described in Chapter IV was applied and gave a result of 20.76% for the whole Project.

This indicator has a value higher than the cost of the capital (10%), a result which shows that the benefit of the Project is superior to any investment alternative generated in agriculture. This result is correct, since the Project under analysis is a project to make production more operational, where investments are turned into benefits very quickly (at the end of a cycle), whereas investment projects require a longer maturing period before the investment amount is recovered.

The earlier remarks make it apparent that this is not the best indicator by which to evaluate the Project's yield, because it is difficult to establish a level of comparison. This is why the cost/benefit ratio is used as the most suitable criterion for this type of project.

1.4 SOCIAL ASPECTS

For the most part, the families participated amply and effectively in all the farming activities required by the

TABLE V - 5
 A T P A G E A S A PRODUCTION PROJECTION

CROP	INDICATED	AREQUIPA		JULIACA		CENTRAL REGION		CAJAMARCA		TOTAL	
		1	5	1	5	1	5	1	5	1	5
POTATO	AREA	38.0	189.6	180.0	146.00	230.00	337.00	143.00	209.00	553.0	881.0
	PROD.	400.0	1323.0	500.0	1280.00	1610.00	3451.00	858.00	2094.00	3368.0	8148.0
	YIELD	8.0	7.0	5.0	6.75	7.00	10.25	6.00	10.00	6.1	9.2
WHEAT	AREA										
	PROD.										
	YIELD										
BARLEY	AREA	46.0	80.0	30.0	44.00					76.0	124.0
	PROD.	46.0	80.0	30.0	64.00					76.0	144.0
	YIELD	1.0	1.0	1.0	1.46					1.0	1.2
PULSE	AREA			20.0	29.00 (*)	54.00	79.00			74.0	108.0
	PROD.			10.0	21.00	54.00	116.00			64.0	137.0
	YIELD			0.5	0.73	1.00	1.46			0.9	1.3
VEGETABLE	AREA					13.00	19.00	51.00	71.00	64.0	90.0
	PROD.					23.00	50.00	51.00	112.00	74.0	162.0
	YIELD					1.80	2.64 (**)	1.00	1.50	1.2	1.8
F. DATE	AREA										
	PROD.										
	YIELD										
GUINOA	AREA										
	PROD.										
	YIELD										
PASTURE CROPS	AREA										
	PROD.										
	YIELD										
CORN	AREA					42.00	61.00	21.00	31.00	63.0	92.0
	PROD.					50.00	103.00	42.00	74.00	92.0	182.0
	YIELD					1.20	1.70	2.00	2.40		
TOTAL	AREA	126.0	269.6	150.0	210.0	320.0	496.0	215.0	311.0	830.0	1295.0
	PROD.	446.0	1403.0	540.0	1365.0	1737.0	3725.0	951.0	2280.0	3674.0	8773.0
	YIELD	7.0	8.0	6.0	10.9	11.0	16.1	9.0	13.9	9.1	13.5

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TABLE V - 6
 A D R A / O F A S A ECONOMIC PROJECTION

REGION	ITEM	A R O						PRESENT
		0	1	2	3	4	5	VALUE
AREQUIPA	BENEFIT		207600	273300	341100	425250	544125	1299179
	COSTS	187887	205326	251738	306283	376932		1070159
	BALANCE	-187887	2274	21562	34817	48318	544125	229020
JULIACA	BENEFIT		392473	457304	551196	669599	813572	2111362
	COSTS	311722	342895	377184	419902	456393		1562368
	BALANCE	-311722	49578	80120	131294	213206	813572	548994
CENTRAL REGION	BENEFIT		690430	823320	996218	1205423	1458562	3776448
	COSTS	716552	788334	867797	955477	1051978		3586786
	BALANCE	-716552	-107904	-44477	40741	153445	1458562	189662
CAJAMARCA	BENEFIT		341790	444878	614454	743467	773013	2127813
	COSTS	426106	468716	515588	567147	623861		2130529
	BALANCE	-426106	-126926	-70710	47307	119606	773013	-2716
TOTAL	BENEFIT (1)	0	1622293	1998802	2502968	3043739	3589272	9314802
	COSTS	1642267	1805271	2012307	2248809	2509164	0	8349842
	BALANCE	-1642267	-182978	-13505	254159	534575	3589272	964660

(1) No. OF COMMITTEES = 95
 TRAINED PEOPLE = 7,169

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Project. In the Southeastern Region, the participants' interest and expectations even went beyond the demands of the Project. Despite a certain amount of distrust and uncertainty at the outset in the Northern, Central and Southern Regions, once the peasants saw the project components materializing, they started participating effectively and enthusiastically in all the field labors and other Project-related activities. The type of Project activities and components - the seeds, fertilizers, tools and training offered - motivated the community members to take part in the Project. (Table V-1 Goals and Progress). In the Puno communities where clean water wells were built, an even greater dedication to communal work was shown, because of the importance of having water for domestic consumption and hygiene.

There was a far greater participation of men at leadership levels and on the Project committees. However, in this respect different characteristics were noted in the different areas. The women's presence at these levels was negligible in Santa Cruz, Juliaca and Tayacaja; they had a token participation in Huancayo and Caylloma; where they did take a more active part in these tasks was in Huanta.

In the Central and Southeastern Regions the community organization as a social and economic unit is rooted in tradition, and has facilitated the social reproduction of the peasant family, and a sharing of knowledge and labor. In the Central Region, the socio-political problems of the past decade have produced some distortions in the community organization and its functioning, especially in Huanta and some of the Huancayo communities. In the Caylloma and Santa Cruz areas, the division of the land into small, individually-owned plots, has been gradually weakening the communal organization over the past two decades.

Against this background, the application of the Project in the beneficiary communities encouraged a re-grouping and strengthening of the community structure. The community now needed to be a more tightly organized unit, in order to plan, promote and carry out the different project activities.

The communal organization assimilated the Project committees in all cases, and the committees' performance was such that the Project activities took place as planned. The leaders interviewed felt that their coordination work had been effective, and good working relations had been maintained both with the community authorities and the beneficiary families.

The committees coordinated directly with the conducting agency, obtaining the prior approval of the community Assembly for questions of major importance. No problems were encountered in the coordination work. Coordination was helped by the fact that most of the communities were near to the executing agency's offices, and the extensionists stayed in some of the communities.

The beneficiary families expressed great satisfaction with the introduction and operation of the revolving loan funds, in spite of their limited understanding of how it worked.

The community members and, in particular, the leaders, considered the revolving loan funds to be of utmost importance: an effective means of guaranteeing the reproduction of seeds and other supplies for the next agricultural cycle. They show their seed storehouses to visitors with evident pride and satisfaction. In Puno, Caylloma and Huancayo especially, the Project aroused great expectations and enthusiasm. In Huanta, the participants were particularly pleased that the Project had introduced potato crops, which would satisfy their dietary needs.

All (100%) of the participants surveyed in Juliaca, Huancayo, Tayacaja and Santa Cruz repaid, their loans at the correct time. They considered their responsibility in this respect as a way to guarantee that the aid in the form of seeds and other inputs would be continued for the following agricultural cycles, and its benefits extended to other families in the community.

In Caylloma and Huanta, only 90% of the beneficiaries made their repayments. In these areas, the low yields and crop losses due to adverse natural elements and pests made it difficult to comply with this obligation.

The paucity of the peasant communities' productive resources, resulting from the small area of land cultivated per family, poor soils, scarce and irregular rainfall, aggravated by unpredictable periods of drought and frost, the precarious technical and social conditions under which they carry out their farming activities, and, in the case of the central region, the socio-political problems, all combine to minimize the productivity of the resources available. These limiting factors also produce a very much weakened family income structure, which does not cover the basic needs for the social and economic reproduction of the peasant family.

Under these circumstances, the Project produced relative

increases in the family income and in the employment of family members in the beneficiary communities, since their agricultural production was more voluminous and of better quality than in previous years.

The Project had a direct positive impact on the employment indices, insofar as the different project components enabled the beneficiaries to cultivate larger areas of land, and the Project therefore demanded more work from the family labor force in agricultural and other activities. Most of the heads of family said that they had worked more this year on their own land, in communal work and reciprocal work. Considerable numbers of beneficiaries from the Santa Cruz communities and smaller numbers from the other regions, had obtained more paid work in their own communities.

In the communities of the Southeastern Region, there was an increased demand for family labor in communal work on the construction of the water wells. Both men and women took part. In the Central Region, the "food for work" program demanded a great deal of labor.

Parallel to the deterioration of the beneficiary communities' productive structure over the past few decades, the peasant family's food supply, and consequently their nutritional levels have become more and more deficient.

The relative increase achieved by the Project in agricultural and livestock production, the greater employment of family labor, and raised family incomes, made it possible for the peasant families in the beneficiary communities to obtain relatively larger supplies of food. All (100%) of the participants in the Central, Southern and Southeastern Regions, and 71% in the Northern Region said that they now had more food.

The Project had a significant impact in reducing the migration from the beneficiary communities. Last year, 100% of the participants interviewed from the Central and Southeastern Regions had migrated for periods ranging from one to six months; 67% and 54% from the Southern and Northern Regions had migrated for periods of two to ten months and one to three months, respectively. This year, the number of migrants dropped by over 50% and the length of time spent away from their communities was less than two months on average. The significant reduction of the migration was a result of this year's improved family income and employment situation.

A significant aspect of the Project's effect in the Central Region (Tayacaja and Huanta) was that by reactivating the farming economy, it motivated the "return migration" of peasant families who had left their communities for an indefinite length of time in previous years.

The peasant women perceived the Project components as an important way to guarantee more food and work for their families. They participated effectively in all the farming activities required by the Project, and attended all Project-related meetings, either together with their husbands or alone, as heads of family. In the communities of the Northern, Central and Southeastern Regions, a large proportion of the heads of families are women, and their response to the Project's requirements for cooperation or participation were positive at all times.

The women assume all the responsibilities of the management and internal organization of the family productive unit in the absence of their husbands. Their work became intensified and diversified with the Project: they had more work on their own land, more communal work, and they also made the meals for everyone to eat during the communal work days, particularly in the communities where water wells were installed, in the Southeastern Region. The women are also responsible for selling the products.

However, in contrast to their dynamic input to all the project activities and direct production work, the women had a very limited participation in leadership roles or on the Project committees. This is probably related to the low cultural level predominant in these communities, and the fact that the women are at a disadvantage because they have less access than the men to school education or to technical training. This hinders and limits their performance in leadership positions.

In Huanta, a high proportion of heads of beneficiary families are women: a result of the sociopolitical problems which left a considerable number of widows with families to bring up. Under these circumstances, the peasant women showed great dedication and fortitude as they faced the challenge of maintaining the family economy. In Caylloma, Huanta and Tayacaja, where the Emergency Project was reinforced by programs such as mother-child, education and nutrition programs, focusing on improving the family's living conditions, the women's activities became even more diversified and intensified.

The participants' concerns about their immediate future are,

first and foremost, that the support given by this Project be continued and extended, diversifying the seeds and including vegetable and bitter potato seed for the communities in the Southern and Southeastern Region. They also feel there is a need for more training. In Huancayo, there is great enthusiasm about the production of earthworm humus. In Huancayo and Juliaca, they are interested in hothouse production. The Juliaca participants also request more training in animal farming techniques. In Santa Cruz and Huanta they are interested in receiving help to extend and improve social welfare services for the care of children and old people, and also for the installation of vegetable gardens.

In Tayacaja, Huancayo, Santa Cruz and Caylloma, some beneficiaries requested that irrigation infrastructure be built or existing infrastructure be improved. An evident need is to provide training, especially for the women, and to give technical and financial assistance for them to set up artisan weaving workshops in Caylloma, Juliaca, Huancayo and Santa Cruz.

2. PROJECT EVALUATION

2.1 EVALUATION OF RESULTS

The following evaluation is based on a set of numerical indicators which seek to measure the effectiveness of the work carried out by the three offices responsible.

The indicators applied are:

- The cost/benefit ratio, described in point 1.3, which expresses the level of coverage of a project's costs.
- The investment/beneficiary ratio, which indicates the effort made by the project for each family served.
- The beneficiary/technician ratio, measuring the degree of coverage of one technician to assist the number of families specified.
- The hectares/beneficiary coefficient, indicating the degree of land per family.
- The hectares/technician coefficient, expressing the degree of coverage of a technician in technical assistance.

- The beneficiaries/committee coefficient, which seeks to evaluate the level of concentration of the revolving loan fund committees.
- The beneficiaries/trained personnel indicator, which enables us to analyze the effort to be made in order to replicate the knowledge acquired by each person attending a course.
- The area harvested/area sown ratio, which measures the degree of effectiveness in crop management.
- The total sales/committee ratio, indicating the degree of commercial turnover that the committees may have.
- The share of income in the investment, which measures the effort needed in order to obtain one unit of income.

The basic concept is that a one hundred per cent goal coverage does not necessarily mean that the objectives have been met, and it is therefore necessary to establish other means of defining the real degree of coverage of objectives or the distortions which prevent the goals being met.

The following results were obtained from the indicators described above for the total Project.

QUANTITATIVE EVALUATION INDICATORS

Indicator	Result
- C/B Ratio: 92/93	0.51
Five years	1.12
- Investment/Beneficiary	126.98
- Beneficiary/Technician	612
- Hectares/Technician	34.9
- Hectares/Beneficiary	0.057
- Beneficiaries/Committee	148
- Beneficiaries/Trained Personnel	1
- Area Harvested/Area Sown	0.663
- Total Sales/Committee	10,131
- Share of Income	
in Investment:	
Total	1.69
Potato sales	0.61
Corn sales	0.046

The C/B coefficient gives a very low result for the 92/93 cycle but, as explained earlier, this is mainly due to the bias in the results of the Central Region office and the Northern (Cajamarca) office. The indicator for the five-year projection, on the contrary, shows a good value. The Project will, at least, maintain the levels of capitalization of the different productive activities and show a small surplus, which will permit its recovery.

The second coefficient (Investment/Beneficiary) gives a low value: a contribution of only 127 Soles per family served. This indicates either that the effort made is being diluted too much, or that the Project is failing to attend to families in order to attain other specific goals.

The coefficient of beneficiaries per technician gives a positive sign, since a project coverage of 612 families per technician is a reasonable level. If an adequate complementary program is set up to train new promoters, this coefficient will improve.

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With regard to the hectares/technician coefficient, this indicator is complementary to the previous one, and also indicates that on the average the supervision could be effected quite easily if each technician had to supervise the crops (35 hectares). The attention density would improve if the work were done with a team of promoters.

The hectares/beneficiary coefficient indicates a serious development problem for the area. The fact that each family has only 0.05 hectares means that it will be impossible to improve the crop productivity, no matter how much technical or financial aid is given.

The average number of beneficiaries served by a committee is 148, which means that each committee must be well structured if it is to control the credit operations of such a large number of users.

Regarding the teaching effort to be made by each trained person in the community, the value is very good (1 family). However, this means that each trained person must have the ability and the necessary resources to communicate what he has learned.

Coverage of the area harvested can be considered within acceptable limits in other crops, although somewhat low. This can be explained by the various problems encountered during the course of the Project.

Potential sales per committee also indicate the need to set up stable, well managed mechanisms to control the significant sums involved in each committee (over S/.10,000 Soles).

Finally, the share of sales in the investment indicates that if, on average, an investment of 1.69 Soles is needed to obtain an income of one Sol, the share of the potato crop in that investment is 1.61 Soles, concentrating practically the whole investment effort here. This crop is therefore the most investment-efficient one.

3. CONCLUSIONS AND RECOMMENDATIONS

3.1 CONCLUSIONS

The evaluation carried out has made it possible to identify the following results of the project execution, grouped according to the evaluation criteria applied:

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a) Technical Aspects

- ADRA/OFASA's Regional Offices organized and implemented 66 Emergency Committees, with AID funding, benefiting a total number of 9,786 poor families in the Provinces of Puno, Chucuito, Juliaca and Lampa in the Department of Puno; Huanta in Ayacucho; Tayacaja in Huancavelica; Huancayo in Junín, Caylloma in Arequipa; and Santa Cruz in the Department of Cajamarca.
- A greater quantity of seed was acquired than planned in the goals. However, 60% of the potato seed was not of sufficiently high quality as regards genetic or health aspects. Seeds of the other crops were certified seeds. It should also be noted that the seed distribution was not complete: 87.73 mT of seeds remained undistributed, and at the time of our visit, they were in ADRA/OFASA's regional storehouses.
- The agricultural tools and equipment were purchased and distributed late, when the crops were already in full growth or at the end of their vegetative period. Of the 7,450 sets acquired, only 1,588 were distributed.
- The technical assistance program motivated the beneficiaries to use certified seeds, chemical fertilizers and food-processing techniques. Training was given to community leaders and agricultural promoters in aspects of organization, administration and management of the revolving loan funds.
- As a consequence of their monitoring work, the AID Advisers were able to make recommendations which improved the Project management.
- The area cultivated was 841.3 Ha., and the area harvested was 547.72 Ha., representing a loss of 35% of the area sown.
- A total of 862.26 mT of seeds were sown, and 731.59 mT were recovered, representing 84.85% of the quantity sown. This means that the goals could have been met if there had not been the adverse climatic conditions which considerably affected the production and productivity.

b) Financial and Administrative Aspects

- Project administration and supervision were adequate in the Southern and Southeastern Regional Offices. They

were deficient in the Northern Regional Office. There was insufficient supervision in the Central Regional Office.

- The performance of the professional and technical personnel was good, in general, with the exception of the professional in charge of the project in ADRA/OFASA's Northern Regional Office.
- The correct purchasing procedures were followed.
- With the exception of the Central Regional Office, the transportation, storage and distribution of the inputs was well handled.
- Documents were properly filed in the Southern, Southeastern and Central Regional Offices.
- The participation of the Monitor/Adviser was positive.

c) Economic Aspects

- The potato crop demands the highest investment per unit of area.
- The value of the first year's production is estimated at about S/.669,466 (Soles). Production was 1,951.29 mT.
- The crop profitability was low, but the production obtained was still very significant for the inhabitants of the project area, because this crop is a basic element in their family diet.

d) Social Aspects

- Members of the beneficiary communities participated most effectively in all the Project activities, despite a certain amount of reticence initially in the Northern, Central and Southern regions. With its promotional work and the first deliveries of inputs, the agency managed to motivate the beneficiaries to participate enthusiastically. The communities in the Southeastern region showed ample participation in all Project-related activities from the outset, and they even undertook tasks over and above the scheduled work. The participants in all the regions were motivated by the components offered, namely the inputs and training; and in Juliaca they were particularly enthusiastic about the

installation of the water wells.

- The traditional close-knit community organization which is still strong in Huancayo, Tayacaja and Juliaca enabled the communities in these areas to adapt easily to the project requirements, including the incorporation of committees and other mechanisms for internal control. In the case of the Huanta, Santa Cruz and Caylloma communities, whose communal organization had become weak, ADRA/OFASA applied the Project in such a way as to produce the regrouping and strengthening of the community as an organized structure, so that it would function as the agent supporting and promoting the series of Project activities.
- Within each community organization, the Project committees effectively performed their functions of administering the revolving loan fund and coordinating activities. Committee members were elected by, and reported to, the Community Assembly.
- The families expressed their enthusiastic acceptance of the introduction and operation of the revolving loan fund. They realized how significant and important it was, and viewed it as a kind of security capital that would enable them to reproduce their productive capacity in future agricultural cycles. Some negative comments were made by small numbers of participants in Huanta and Santa Cruz regarding the interest that had to be paid in to the revolving loan fund.
- The Project generated relative increases in the family incomes, principally because the agricultural production was better than in previous years. Also, the productive and other activities promoted by the Project created considerably more employment of the family labor force in the communities. This effect was reinforced by the work on the water wells in the Southeastern region and by the Project's integration with other regular programs in the Central region.
- The Project enabled the beneficiary families to obtain a relatively larger supply of food, both from their own production, which is mostly for home consumption, and from having more income available, thus improving their nutritional values. In Huancayo and Tayacaja this goal was reinforced by a "food for work" program being carried out at the same time. Cases of infant malnutrition can still be seen in some communities of

the Northern and Southeastern regions.

- The Project had a significant impact on the migratory trends in the beneficiary population: there has been a 70% reduction in the months/man of peasants leaving their communities temporarily to find paid jobs in more developed towns or cities. A very important result of the Project was that it motivated the "return migration" of several peasant families to their communities in Huanta.
- The women's participation in all the productive activities and other Project-related events was highly significant. Their great expectations were based on the importance they attached to the Project components for the security of their families. The women's participation at the leadership level and on Project committees was limited. In the Northern and Southeastern regions, their participation at these levels was practically nil, reflecting the fact that the women have a lower level of school education. In the Central and Southern regions they had a small participation in leadership and committee roles. Huanta was in the exceptional situation of having women contributing to the Project at all levels, as a part of their strategy for confronting the social problems in the area.

3.2 RECOMMENDATIONS

a) Technical Aspects

- Appropriate planning should be effected with regard to the availability of capital, so that the inputs may be purchased in good time, thus avoiding the problems that occurred in the present agricultural cycle.
- In order to provide a good service, activities should be coordinated to define the sowing and harvesting schedules. The inputs can then be supplied efficiently at the correct time.
- It is also important that the Regional Offices have qualified technical personnel, so that the technical assistance service may be extended and may be given directly to the producers. It should be recalled that at the present time neither the Ministry of Agriculture nor the universities have the financial or human

resources to support the peasant producers effectively in this respect.

- The communities should continue to receive support in the form of certified seeds. They should be encouraged to grow bitter potatoes, so that the production may be processed to make potato starch and starch.
- The producers should be encouraged to use organic fertilizers (guano, farmyard manure) and their phytosanitary control should not alter the natural balance necessary for environmental protection.
- The Regional Offices should carry out a follow-up of the revolving loan fund beneficiaries, to evaluate the agricultural production and the behavior of the communities in order to systematize the operation of the revolving loan funds.

b) Financial and Administrative Aspects

- A Financial Director should be employed for the Central Regional Office.
- A vehicle should be provided for the Huanta Zonal Office, so that technical supervision may be carried out efficiently.
- The funds should arrive four months before the start of the agricultural cycle, so that the agency may purchase good quality inputs at the proper time, and schedule the project activities better.

c) Economic Aspects

- The results of the economic evaluation justify the continuation of the Project, reinforcing the technical, economic and social aspects indicated in this report.

d) Social Aspects

In order not to interrupt the process that has been successfully initiated by the Emergency Project, we suggest that a regular project be implemented immediately, to pursue the following objectives:

- Consolidate the productive and administrative organization of the peasant communities, bearing in mind that the organization and participation of the

inhabitants of these communities are the motors of any development process.

- Reinforce the process of capitalization of the revolving loan fund inputs, especially in the areas where the economy is the most depressed, creating in the local inhabitants the awareness of the significance of the system for the improvement of social conditions.
- Intensify the training of the male and female members of the beneficiary population, in harmony with their ecological, socioeconomic and cultural environment.

CHAPTER VI

EVALUATION OF THE PROJECT EXECUTED BY CARITAS

This chapter contains a summary of the principal aspects of the evaluation of the four Diocesan CARITAS offices visited: CARITAS Sicuani, CARITAS Cuzco; CARITAS Chuquibambilla and CARITAS Abancay.

1. GOALS AND RESULTS

Table VI-1 shows the goals and the progress made for each of the activities indicated, thus indicating the degree of efficiency in project management, and any failures to comply with project objectives.

1.1 TECHNICAL ASPECTS

Two categories of seeds were purchased by CARITAS: food crops (cereals, pulse, vegetables); and fodder crops (fodder oats), which were all of guaranteed quality. However, 60% of the potato seed was of poor quality both in genetic and health aspects.

Table VI-1 shows 94.62% progress in the acquisition of seeds. It was not possible to meet the planned goal because of a price increase in potato and broad bean seeds.

The fertilizers purchased were urea, diammonium phosphate and guano. A total volume of 385.65 mT was purchased, equivalent to 32.23% of the goal. They were not all distributed to the communities because they were bought too late to be used in the current cycle.

In the CARITAS project area, the principal crops grown are potatoes and pulse. Some communities have access to irrigation and the rest practice dry-farming.

CARITAS gives its decided support to the rehabilitation and maintenance of irrigation infrastructure. They used 175.68 mT of cement (4,134 bags) for this type of work in Abancay, Chuquibambilla and Cuzco. The cement was bought with the unspent seed money.

In the 92/93 agricultural cycle, the production was affected by adverse climatic conditions (frost and hailstorms) which caused losses of over 15% of the areas sown, and affected crop productivity. The following yields were obtained:

TABLE VI-1
CONSOLIDATED GOALS AND PROGRESS OF PRINCIPAL PROJECT ACTIVITIES

CATED BY : CARITAS

ACTIVITIES	UNIT	CARITAS CUSCO			CARITAS ARECAJAY			CARITAS CHUQUIBAMBILLA			CARITAS SICUANI			TOTAL		
		GOAL	EXEC.	% PROGRESS	GOAL	EXEC.	% PROGRESS	GOAL	EXEC.	% PROGRESS	GOAL	EXEC.	% PROGRESS	GOAL	EXEC.	% PROGRESS
ORGANIZATION OF REVOLVING FUNDS	COMMITTEE		25			80			47			31			183	
ACQUISITION OF INPUTS																
1 SEEDS	MT	326.14	295.64	90.65	291.00	257.19	88.38	93.00	90.12	91.96	476.97	474.52	99.51	1282.11	1137.47	88.72
2 FERTILIZERS	MT	72.65	95.65	131.66	83.80	110.00	132.53	24.00	30.00	125.00	112.00	150.00	133.93	291.65	335.65	115.11
3 MATERIALS (CEMENT)	MT	23.25	23.25	100.00		104.63	100.00	42.50	47.00	112.47				65.75	175.68	267.19
DISTRIBUTION OF INPUTS																
SEEDS:	MT	295.64	292.66	98.99	257.19	253.17	98.44	90.12	92.12	100.00	474.52	471.21	99.32	1137.47	1127.15	98.67
Potato	MT	86.57	86.57	100.00	163.39	163.39	100.00	33.00	33.00	100.00	175.54	175.54	100.00	458.50	458.50	100.00
Wheat	MT	40.00	40.00	100.00	35.17	31.53	89.65	25.56	25.56	100.00	65.62	65.62	100.00	165.35	162.71	97.86
Barley	MT	139.98	138.22	98.74	43.50	43.50	100.00	31.56	31.56	100.00	185.92	185.92	100.00	321.95	320.20	99.46
Pulse (S)	MT	20.02	27.62	95.84	3.87	3.87	100.00				29.22	20.82	100.00	60.71	59.51	97.86
Fodder Oats	MT										118.62	189.56	93.14	118.62	189.56	95.14
Corn	MT				11.26	10.00	88.81				50.00			61.26	10.00	16.32
Quinoa	MT										2.00	0.52	26.00	2.00	0.52	26.00
Pasture grasses	MT										5.00	5.00	100.00	5.00	5.00	100.00
Vegetables	MT	0.27	0.25	92.59							0.30	0.25	10.00	0.57	0.28	49.12
FERTILIZERS:	MT	95.65	51.65	53.90	110.00	79.10	71.91	30.00	30.00	100.00	150.00	150.00	100.00	305.65	310.75	88.58
Guano	MT	90.00	46.00	51.11	110.00	79.10	71.91	30.00	30.00	100.00	150.00	150.00	100.00	300.00	305.10	88.29
Diamonium Phosphate	MT	3.65	3.65	100.00										3.65	3.65	100.00
Urea	MT	2.00	2.00	100.00										2.00	2.00	100.00
MATERIALS (CEMENT)	MT	23.25	23.25	100.00	104.63	104.63	100.00	47.00	47.00	100.00				175.66	175.68	100.00
ROPS SOWN																
POTATO																
Sown	Ha	67.00	50.00	74.63	83.00	103.10	124.22	24.00	26.40	110.00	112.00	99.73	80.15	206.00	206.25	100.00
Harvested	MT		339.30			622.44			137.20		370.00			1469.02		
WHEAT																
Sown	Ha	40.00	37.00	92.50	35.00	31.00	88.57	100.00	295.60	142.00	60.00	639.00	73.04	1970.00	1971.00	70.94
Harvested	MT		599.10			505.00			303.40		300.00			1780.30		
BARLEY																
Sown	Ha	1400.00	1302.20	93.73	500.00	420.00	84.00	300.00	315.00	82.00	1125.00	1056.00	93.87	3403.00	3173.20	93.19
Harvested	MT		1865.97			630.00			567.00		480.20			3543.17		
BEAN																
Sown	Ha				260.00	30.70	14.00							260.00	30.70	14.00
Harvested	MT					69.66								69.66		
BROAD BEANS																
Sown	Ha	350.00	276.20	78.91							150.00			350.00	434.20	124.06
Harvested	MT		176.70								31.05			203.55		
FODDER OATS																
Sown	Ha										1125.00	1005.62	90.50	1125.00	1035.62	92.50
Harvested	MT										7597.20			7597.20		
MAIZ																
Sown	Ha	126.00			625.00	107.00	17.12	150.00			526.00			1527.00	107.00	7.01
Harvested	MT					192.60								192.60		
QUINOA																
Sown	Ha										147.00	51.50	35.03	147.00	51.50	35.03
Harvested	MT										10.05			12.05		
VEGETABLES (S)																
Sown	Ha		66.20								53.20			119.20		
Harvested	MT															
TOTAL AREA SOWN	Ha	2343.00	2191.00	93.52	2219.00	750.00	47.33	734.00	597.00	81.34	3775.00	3157.00	78.14	7090.00	6666.00	75.68
TRAINING	PARTIC.		584			1747			200			479		2612		
COMMUNITIES	NO		300			42			47			213		600		
BENEFICIARY FAMILIES	NO	4604	7200	156.37	4036	1369	46.31	1463	2307	162.60	7390	14000	189.45	17573.00	25456	144.82

LE : Consultant Group
Includes Beans and Broad Beans
Harvests were not recorded

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Potatoes, 6.03 mT/Ha; Barley, 1.33 mT/Ha; Wheat, 1.36 mT/Ha; Fodder Oats, 7 mT/Ha; Quinoa, 0.28 mT/Ha; Corn, 1,8 mT/Ha.

Technical assistance and technology transfer were effected by the four Diocesan CARITAS offices. However, they did it sporadically, being limited by their lack of technical personnel, and the fact that their local committees were dispersed, and some communities were practically inaccessible.

The technical assistance was given by professionals belonging to the agency and from the universities, but, as already mentioned, they were not able to give complete coverage. At present they are only reaching community leaders and promoters, not the producers.

Within these limitations, training was given to 183 Committees and to the technical personnel of the four CARITAS offices. Training focused on: the administration and operation of the revolving loan funds; soil conservation; crop management; seed selection; and the storage and conservation of products.

Generally speaking, the training served to help the local committees administrate their resources better and establish better coordination with parish priests, catechists and technicians employed by the Church.

It should be noted that CARITAS played a major role in organizing local parish committees in the Provinces and Districts. Many of these committees are led by the parish catequists, with supervision and follow-up from the technical personnel of the Diocesan CARITAS offices in Cuzco, Abancay, Chuquibambilla and Sicuani. CARITAS worked with very distant communities and served a larger number of families.

CARITAS del Perú drew up a set of regulations governing loans from the revolving loan funds, for application in all the Diocesan CARITAS offices. The regulations stipulate the objectives, the administrative organization chart, functions, selection criteria, interest, fines and penalties for non-compliance, and percentages of loan fund recovery, which fluctuate between 10% and 20%.

The revolving loan funds are administrated directly by the local parish committees, for which CARITAS has set up a loan fund control and administration system. Table VI-2 shows the volumes of seeds repaid to the revolving loan funds.

TABLE VI-2
DISTRIBUTION AND RECOVERY OF SEEDS FROM REVOLVING LOAN FUND CONSOLIDATED

EXECUTED BY : CARITAS

(MT)

CROP	CARITAS CUSCO			CARITAS ABANCAY			CARITAS CHUQUIZAMBILLA			CARITAS SICUANI			TOTAL		
	SEED DISTRIB. MT	SEED RECOV. MT	RECOVERY %												
-POTATO	85.57	98.88	113.28	163.39	97.88	59.37	33.38	29.78	89.28	175.54	77.78	44.26	458.58	382.48	83.95
-WHEAT	48.88	31.54	78.85	31.53	28.88	63.43	25.56	23.88	89.98	65.62	26.53	48.43	162.71	181.87	62.12
-GRAIN BARLEY	138.22	187.85	78.83	43.58	25.45	58.51	31.56	28.48	89.99	186.92	18.34	17.15	328.28	138.84	56.23
-BROAD BEANS	27.62	11.31	48.95							28.82		8.88	55.64	11.31	28.33
-BEANS				3.87	2.88	72.35							3.87	2.88	72.35
-VEGETABLES	8.25									8.83		8.88	8.28	8.88	8.88
-FODER OATS										188.56		8.88	188.56	8.88	8.88
-QUINOA										8.52	8.15	28.25	8.52	8.15	28.35
-PASTURE CROPS										6.88			6.88		
-CORN				18.38	7.28	56.18							18.38	7.28	56.18
TOTAL	292.66	248.78	84.78	253.17	152.45	68.22	98.12	31.18	39.99	491.21	122.72	24.98	1127.13	584.97	53.87

SOURCE : Consultant Group

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The technical contribution of the AID Monitor/Adviser was useful for the execution of the Project. He wrote reports on this monthly follow-up visits, containing recommendations to remedy some deficiencies detected in administrative and technical aspects.

1.2 FINANCIAL AND ADMINISTRATIVE ASPECTS

CARITAS Cuzco, Chuquibambilla and Abancay were well organized to carry out the Project, and their administration and supervisory actions were adequate. CARITAS Sicuani did not have adequate installed capacity, nor did it have the means of transportation to supervise the extensive, distant area, which meant that its efficiency was severely limited.

The correct procedures were followed for the purchase of inputs. They were adequately handled and distributed, except in CARITAS Cuzco, where because the inputs arrived after the sowing season, 1.76 mT of barley seed and 44 mT of guano were not distributed.

1.3 ECONOMIC ASPECTS

The total production obtained in the first cycle, 1992/93, amount to 14,880.55 mT, with an estimated value of S/.3'648,348 (Soles). This is a very significant amount, considering previous recovery amounts in these areas. See Tables VI-3 and VI-4.

The operation of the revolving loan fund of agricultural inputs begins with the recovery of the seed habilitated by the Project for the 1992/93 cycle. For the five-year projection, the same production levels as those of the previous year are maintained, and there are moderate 5% to 10% increases in the land area. Increased yields are expected, since certified seeds will have to be used, to avoid the problems encountered in the 92/93 cycle, mainly with the potato seed. We recommend that the whole of the 92/93 production be sold, since it is of poor quality, and seeds be purchased from guaranteed seed producers. Labor and fertilizers have been projected in the same proportion.

The total costs of the investment for the four Diocesan CARITAS offices was S/.1'131,550.29 (Soles), as shown in Table VI-5. CARITAS Sicuani had the largest share. Eighty-eight per cent (88%) of the investment corresponds to the purchase of inputs (seeds and fertilizers), which is correct for this type of project.

TABLE VI-3
 ESTIMATED VALUE OF FIRST CYCLE
 CARITAS-CONSOLIDATED
 (IN SOLES)

EXECUTED BY : CARITAS

EXECUTING AGENCY	AREA SOWN (Ha)		AREA HARVESTED (Ha)		PRODUCTION (MT)		VALUE (S/.)		
	FOR CONSUMPTION	FOR FODDER	FOR CONSUMPTION	FOR FODDER	FOR CONSUMPTION	FOR FODDER	FOR CONSUMPTION	FOR FODDER	TOTAL
SICUANI	2852.18	1885.62	1217.58	1885.62	1192.18	7599.28	553893	768288	1313293
CUSCO	2181.88		1981.58		2981.87		1394818		1394818
CHUQUIBAMBILLA	597.88		597.88		1887.68		298931		298931
ABANCAY	958.88		937.78		2828.58		658186		658186
TOTAL	5788.98	1885.62	4733.78	1885.62	7281.35	7599.28	2888148	768288	3648348

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TABLE VI-5

BUDGET EXECUTION

CONSOLIDATED

(IN SOLES)

EXECUTED BY : CARITAS

COST ELEMENT	CARITAS CHUQUIPAMPILLA		CARITAS ADAMCAY		CARITAS CUSCO		CARITAS SICUANI		TOTAL CARITAS	
	AMOUNT		AMOUNT		AMOUNT		AMOUNT		AMOUNT	
	TRANSFERED	EXECUTED	TRANSFERED	EXECUTED	TRANSFERED	EXECUTED	TRANSFERED	EXECUTED	TRANSFERED	EXECUTED
A. - SEEDS										
POTATO	24000.00	21475.00	60000.00	119930.05	70000.00	69905.00	100000.00	140743.34	262000.00	352133.39
WHEAT	12600.00	15914.65	33000.00	21005.19	24000.00	24000.00	53750.00	41167.05	123350.00	102006.09
BARLEY	19000.00	27100.00	27500.00	37353.70	77000.00	120107.00	69975.00		193475.00	104641.50
CORN	9000.00		40000.00	6709.10	10000.00		31250.00		90250.00	6709.10
PULSE			18200.00	3170.65	24500.00	24499.00		22077.00	42700.00	49747.45
QUINUA							1175.00	6560.00	1175.00	6560.00
FODDER OATS							69975.00	38542.00	69975.00	38542.00
VEGETABLES						10000.00		14773.00		24773.00
PASTURE GRASSES								53475.00		53475.00
TOTAL SEEDS	64600.00	64490.45	170700.00	180240.69	205500.00	240671.00	330125.00	317330.19	702925.00	818740.33
B. - FERTILIZERS										
GUANO	9000.00	10065.00	31125.00	36993.00	25125.00	33740.00	42000.00	50445.00	107250.00	132043.00
DIAMONIUM PHOSPHATE						3175.00				3175.00
UREA						1340.00				1340.00
TOTAL FERTILIZERS	9000.00	10065.00	31125.00	36993.00	25125.00	38255.00	42000.00	50445.00	107250.00	136558.00
C. - MATERIALS										
CEMENT		10065.20				5005.33				15070.53
D. - TRANSPORTATION										
DICESAN	15650.00	14906.00	0300.00	11075.00	4690.00	9027.00	7200.00	17753.10	35920.00	53561.10
INTER-DICESAN			10600.00	14053.51	9000.00	9072.00	15376.00	15490.06	35776.00	39415.57
TOTAL TRANSPORTATION	15650.00	14906.00	10900.00	25928.51	14490.00	18099.00	22656.00	33243.16	71696.00	92976.67
E. - TECHNICAL ASSISTANCE	7573.50	2523.70	7573.50	10125.00	13596.00	13390.95	7573.50	11069.11	36316.50	37116.76
F. - IRRIGATION INFRASTRUCTURE				24045.00						24045.00
G. - MANAGEMENT AND CONTROL								5435.00		5435.00
TOTAL	96023.50	103650.35	236270.50	286140.20	250711.00	324229.20	406354.50	417530.46	990107.50	1131550.29

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The Project income is calculated by estimating the production value, based on the historical in-field prices for each of the Project areas. The resulting value of the 92/93 cycle is shown in Table VI-3.

Based on the results of the 92/93 cycle, five-year estimates were made on a projection of this Project, to evaluate its feasibility over a period which will make it possible to measure its impact realistically.

Income estimates were based on the assumption that the production would increase moderately due to a growth in crop productivity and, to a lesser extent, due to an increase in the area under cultivation. It is also assumed that the prices will remain constant, equivalent to historic averages.

The projected expenses maintain a similar structure to those of the 92/93 cycle. The only change is in the participation of operational expenses, due to a considerable increase in the technical assistance costs, since the Project seeks to consolidate its technology transfer activities.

To determine the Project's profitability, two basic indicators were used: the cost/benefit ratio, and the internal rate of return. The former was considered the principal means of evaluating the effectiveness of goal achievement, since it is more accurate for this type of project.

The IRR is analyzed for reference only. In projects like this, which are mainly to help the beneficiaries to build up a working capital, this is not an indicator which gives homogeneous values, and therefore it is not possible to establish a very reliable consolidated indicator per institution.

These indicators were calculated for three stages of the Project. The first ratio established was the ratio of benefits obtained from the agricultural cycle versus investments made, in order to evaluate the direct effect of the initial funding. The second calculation was of the same ratio, but for the first projection period. The third referred to the evaluation of the five years projected.

In each case, the payment of labor is considered within the costs item. Although it is not a cash expenditure, it is a real value to be assumed in order to attain the benefits of the Project.

The results obtained for the whole Project on the basis of these indicators are:

For the 92/93 cycle: 3648348/2269215 : 1.61

For the first year projected: 4926682/4922782 : 1.00

For the five years projected: 22210934/22371041 : 0.99

This indicates that for the 92/93 cycle, the Project had a good result (for each Sol invested, the beneficiary communities obtained 61 additional céntimos). However, this result is biased in that the yields used for estimating the income are quite high, due to the production characteristics of the project areas. (It is mainly the CARITAS Cuzco area which produces this bias. For this area, the same indicator gives a value of over 2.4, which is too high for agricultural projects). The structure of these index will be analyzed in further detail below.

The above calculations are based on Table VI-6.

The internal return rate for the whole Project, using the formula described in Chapter IV, was 9.36%.

This indicator has a value slightly lower than the cost of the capital (10%), a result which shows that the benefit of the Project is similar to any investment alternative generated in agriculture. This result is correct, since the Project under analysis is a project to make production more operational, where investments are turned into benefits very quickly (at the end of a cycle), whereas investment projects require a longer maturing period before the investment amount is recovered.

The earlier remarks make it apparent that this is not the best indicator by which to evaluate the Project's yield, because it is difficult to establish a level of comparison. This is why the cost/benefit ratio is used as the most suitable criterion for this type of project.

1.4 SOCIAL ASPECTS

All the beneficiaries, male and female, participated actively from the outset of the Project, working in the productive labors and attending the assembly meetings in impressive numbers. However, men and women did not have an equal participation in leadership and administrative roles: female participation is estimated at under 25% at these levels.

TABLE VI - 6
C A R I T A S ECONOMIC PROJECTION

REGION	ITEM	Y E A R						PRESENT
		0	1	2	3	4	5	VALUE
CHUQUIBAMBILLA	BENEFIT (1)		420570	463678	511205	563604	621373	1926390
	COSTS	422370	445574	470003	495669	523966		1946149
	BALANCE	-422370	-25004	-6325	15536	39638	621373	-19759
ABANCAY	BENEFIT (2)		836127	893248	954793	1021147	1092726	3591641
	COSTS	776891	815735	856522	899348	944316		3547012
	BALANCE	-776891	20392	36726	55445	76831	1092726	44629
CUZCO	BENEFIT (3)		1685463	1880082	2075687	2325765	2437124	7747311
	COSTS	1756895	1842393	1933170	1967393	2003591		7875270
	BALANCE	-1756895	-156930	-53088	108294	322174	2437124	-127959
SICUANI	BENEFIT (4)		1984522	2215708	2455986	2592555	2738429	8951592
	COSTS	1967427	2086437	2210625	2275082	2345718		9002610
	BALANCE	-1967427	-101915	5083	180904	246837	2738429	-51018
TOTAL	BENEFIT	0	4926682	5452716	5997671	6503071	10	22216934
	COSTS	4922783	5190139	5470320	5637492	5817591	0	22371041
	BALANCE	-4922783	-263457	-17604	360179	685480	10	-154107

Percentages of share in sales value.

(1) 61.8% barley, 27.9% wheat, 10.3% potato.

(2) 33.3% potato, 26.6% barley, 21.9% wheat.

(3) 57% barley, 20% wheat, 12.9% potato.

(4) 56.4% fodder oats, 19.1% barley, 11.2% wheat, 8.5% potato.

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The beneficiaries' high motivation and desire to participate were partly due to the type of seeds being offered by the Project, which were in keeping with local farming customs and consumption habits. The respect commanded by CARITAS in the area was also a key element in the motivation.

Communal unity and coordination is reinforced to a greater or lesser extent by the permanent interaction between the family units and the community organization. It also depends, among other factors, on the physical environment. Thus, the communities located at high altitudes have a well-consolidated, traditional community organization, in response to the greater risk to which their productive activity is exposed due to adverse climatic factors. Communities located at the intermediate level and in Andean valleys are more loosely organized, due to their greater links with the market.

The political problems in recent years in the Provinces of Andahuaylas, Aymaraes, Grau and Cotabambas weakened and undermined the stability of the community as an organized, functioning unit.

The Project conductors considered the existence and functioning of the community organization to be a basic condition for the project to be able to work. Thus, the incorporation of the beneficiaries was carried out and the various activities were coordinated through the community organization. The community is also a guarantee that the beneficiaries will comply with their obligations. The Community Assembly determines the commitment of its members to the local committee which administrates the revolving loan fund. (Assembly decisions have legal force).

The Local Committee is the body responsible for planning and executing the Project activities, administrating the revolving loan fund and selecting the beneficiaries. The parish representative presides the committee, which has as members one representative each of: the beneficiary community, the local government, the Ministry of Agriculture, other NGOs; and a technical representative of CARITAS.

Coordination between the local committee and the beneficiary communities was effected through the community leaders, who were the communities' representatives on the committees. This coordination was carried out effectively in an atmosphere of mutual understanding. Internal coordination with the beneficiaries and with the local committee and the conducting agency was facilitated by the community-appointed

support commissions or delegates, who report to the Assembly. All the participants interviewed considered that the Project coordination at the different levels had been good, even though the fact that the communities were located far away from each other and were almost inaccessible made it difficult for follow-up activities to be performed.

The community members were very pleased to have the revolving loan fund set up in their communities. They expressed their agreement with the distribution and repayment mechanisms, including the interest and repayment periods established. They viewed the revolving loan fund as an important starting point which would enable them to reproduce the inputs to repay the local committee and replace their seed capital. This positive attitude was also evident among the beneficiaries who had only received small quantities of inputs.

The Project component of food crop seeds made a significant impact, since it provided a direct remedy to the deficient family diet and enabled the beneficiaries to rehabilitate their productive capacity. The seeds and other inputs were distributed by the local committees to communities, groups of small land-owning farmers, and also to individuals. The beneficiaries consider that the distribution to groups is better, since it permits a more responsible management of the resources because of the element of social control.

The characteristic trait of these economies is their poverty, due to the scarcity of their principal resource: land. The plots of land have become fragmented. They are affected by the adverse climatic factors. Added to this, they are farmed under conditions of extreme scarcity of the resources of capital and technology. The land has deteriorated progressively and productivity has become more and more reduced, with the consequent decrease in the peasant farmer's real income. The droughts in recent years produced a perceptible deterioration in the peasants' socioeconomic situation: family incomes became markedly deficient, and no longer covered even subsistence needs. The situation was even more critical in the communities located at the higher altitudes.

Asked about variations in their family incomes as a result of the project, 80% of the beneficiaries said that their incomes had increased, and the remaining 20% said that they had increased slightly in comparison with the previous year.

The group who had obtained higher family incomes as a result

of the project said that their production had improved both in quantity and quality. The best yields were those recorded at the low and intermediate ecological levels. The group who had obtained smaller increases in their family incomes were the participants living in high-lying communities. Their harvests had not improved noticeably, and they had even lost their crops on land affected by pests and adverse climatic conditions. However, this had been compensated by improved livestock production. The beneficiaries from the highest communities consider that even though the yield obtained was minimal, they are in a better condition now than last year.

The project had a direct effect on the employment of the peasant family labor force. All (100%) of the participants interviewed said that members of their families had done more work this year on the family land, as well as reciprocal and communal work, and that the heads of family and older sons had found more paid work in their own or neighboring communities. This increase in the amount of work available for the family labor force was a consequence of the greater extension of land being cultivated, much of which had previously remained fallow due to the lack of seed; and also to the fact that the production was diversified thanks to the variety of seeds provided by the Project.

In the areas of Sicuani, Abancay and Chuquibambilla, the "food for work" program made a significant contribution to the absorption of the family labor force, which was employed on projects for building and rehabilitating irrigation canals, reservoirs, roads, etc.

The Project achievement of improving the beneficiaries' agricultural production resulted in their having more food for home consumption this year in comparison to last year, according to 75% of those interviewed, and "somewhat more" according to the remaining 25%.

The gradual, but constant, deterioration in the income of the southern Andean peasant farmer, resulting from the limitation of his material and technological productive resources and aggravated by the risk of adverse climatic conditions to which his farm production is always exposed, has led to an increasing amount of seasonal migration from the peasant communities, as part of the strategy to obtain a supplementary, but indispensable, subsistence income, from the sale of their labor. The peasants find work as paid agricultural laborers in the valleys of Convención and Lares and also as unskilled laborers or doing other miscellaneous work in the principal towns of the region.

The sociopolitical problems in the outlying provinces of Grau, Cotabambas, Andahuaylas, Chuquibambilla and Espinar triggered a mass migration of the peasant population toward the towns and cities in the region and the rest of the country. The abandonment of the land led to the agriculture becoming even more impoverished in these areas.

A direct consequence of the Project was a noticeable reduction in the migratory flow of the beneficiary population. All the participants interviewed - heads of families and young adults - said that in previous years they had migrated seasonally for two- to six-month periods, whereas this year only 50% of the same group had left their communities to work elsewhere for one- to two-month periods only. This can be explained by the greater demand for the family labor force in farming activities on the beneficiaries' own land, in reciprocal work, paid work, communal work and other activities promoted by the Project in the communities.

It is highly relevant that in Espinar, Chumbivilcas, Aymaraes and Andahuaylas there were some cases of "return migration": families who had migrated permanently now returning to their communities, because of the more favorable farming conditions in the area, principally due to the occurrence of the normal seasonal rain and the Project's stimulating effect on farming activities. The families who returned rehabilitated their land which had remained abandoned and uncultivated.

The women play a fundamental role in these communities, keeping the families together, guaranteeing the best possible distribution of resources, and being at the center of the efforts to obtain those resources. Their activities span family and community functions. Theirs is a key role in the organizing and functioning of the family as a production unit. During the present process of deterioration of the region's peasant economy, the women have redoubled their participation as a productive and reproductive work force. Under these circumstances, the project proved to be a stimulus which aroused the women's interest and conviction. They were willing to take part in the different activities being promoted because they realized that the project was offering them a chance to improve their family's living conditions. They viewed the project components as a means within their reach of achieving greater security and stability in providing for their family's needs.

The women's participation in the project's farming activities was the same as that of the men. They were active in the

field work, and sometimes played leading roles: for example, the women cooked and served the meals for all the participants in the communal work events. The women were also more dexterous and efficient than the men at selecting and handling the seeds. In spite of their great contribution in productive activities, the women did not have such a significant participation in leadership positions. This is linked with the low level of schooling, the fact that only Quechua is spoken in most of these communities, and the absence of technical training for women.

The women's participation in organizing the production becomes evident when their husbands are away. The women then make the decisions concerning the agricultural cycle, allocation of the family labor force and the various aspects of animal farming. They represent the family unit at all the project-related productive, educational and social activities.

The opinions of the community leaders and members regarding the Project were highly positive. They were all (100%) satisfied with the Project because it had given them effective support to enable them to improve their living conditions. Their economic situation had been precarious since they had no longer had any seeds and had therefore been unable to do any productive work in their fields or obtain sufficient food for their families.

They also appreciated the fact that the Project had set up communal seed storehouses, which would enable them to secure adequate supplies for the following agricultural cycles and extend the project to include more beneficiaries. Some communities in Anta have taken the initiative to form an inter-community seed-producers' committee.

Most of the beneficiaries said that they had received a limited amount of technical assistance, but that there had been a few opportunities for the technicians to be present in their communities to attend their problems. A smaller number (10%) of the beneficiaries interviewed said that they had not received any technical training. They all mentioned the fact that the cereal seeds had been received late and for that reason the plants had been affected by the winter frost. They also said that the potato seed was not of good quality.

The general consensus among the participants is that the present Project support should be continued, to reinforce training in technical, economic and organizational aspects.

2. PROJECT EVALUATION

2.1 EVALUATION OF RESULTS

The following evaluation is based on a set of numerical indicators which seek to measure the effectiveness of the work carried out by the three offices responsible.

The indicators applied are:

- The cost/benefit ratio, described in point 1.3, which expresses the level of coverage of a project's costs.
- The investment/beneficiary ratio, which indicates the effort made by the project for each family served.
- The beneficiary/technician ratio, measuring the degree of coverage of one technician to assist the number of families specified.
- The hectares/beneficiary coefficient, indicating the degree of land per family.
- The hectares/technician coefficient, expressing the degree of coverage of a technician in technical assistance.
- The beneficiaries/committee coefficient, which seeks to evaluate the level of concentration of the revolving loan fund committees.
- The beneficiaries/trained personnel indicator, which enables us to analyze the effort to be made in order to replicate the knowledge acquired by each person attending a course.
- The area harvested/area sown ratio, which measures the degree of effectiveness in crop management.
- The total sales/committee ratio, indicating the degree of commercial turnover that the committees may have.
- The share of income in the investment, which measures the effort needed in order to obtain one unit of income.

The basic concept is that a one hundred per cent goal coverage does not necessarily mean that the objectives have been met, and it is therefore necessary to establish other means of defining the real degree of coverage of objectives

or the distortions which prevent the goals being met.

QUANTITATIVE EVALUATION INDICATORS

Indicator	Result
- C/B Ratio: 92/93	1.61
Five years	0.99
- Investment/Beneficiary	47.62
- Beneficiary/Technician	2,121
- Hectares/Technician	485
- Hectares/Beneficiary	0.23
- Beneficiaries/Committee	139
- Beneficiaries/Trained Personnel	1
- Area Harvested/Area Sown	0.848
- Total Sales/Committee	22, 835
- Share of Income in Investment:	
Total	0.29
Potato sales	0.04
Barley sales	0.12
Wheat sale	0.06
F. Oats sales	0.05

The C/B coefficient results in a contradiction between the estimated result of the 92/93 cycle and the five-year projection. The difference, as previously mentioned, is because the calculation of the 92/93 income was based on very high yields; while for the projection, the yields were estimated based on historic averages.

The coefficient calculated for the five-year projection is acceptable; the Project will at least maintain the levels of capitalization of the different productive activities.

The second coefficient (Investment/Beneficiary) gives a very low value: a contribution of only almost 50 Soles per family served. This indicates either that the effort made is being diluted too much, or that the Project is failing to attend to families in order to attain other specific goals.

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The beneficiaries per technician figure also give a warning signal, since a Project coverage of 2,121 families per technician means that it is practically impossible to give technical assistance. Even if adequate program is set up to train new promoters, the final result will still be critical.

With regard to the hectares/technician coefficient, this indicator is complementary to the previous one, and also indicates the difficulty there would be if each technician had to supervise the crops (485 hectares). The attention density would continue to be high even if the work were done with a team of promoters, and the results of the supervision would be practically nil.

The hectare/beneficiary coefficient indicates a serious development problem for the area. The fact that each family has only 0.23 hectares of land means that it will be impossible to improve the crop productivity, however much technical or financial aid is given.

The average number of beneficiaries served by a committee is 139, which means that each committee must be well structured if it is to control the credit operations of such a large number of users.

Regarding the effort to be made by each trained person, the value is very good (1 family). This indicates that the training work done would enable the information obtained to be transmitted to the whole beneficiary population. However, this indicator is merely a numerical reference; the above-mentioned result can be achieved only if the training program has been well structured and disseminated in the different areas.

Coverage of the area harvested can be considered within acceptable limits in other crops, especially bearing in mind the various difficulties that occurred during the course of the Project.

Potential sales per committee indicate the need to set up stable, well managed mechanisms to administrate these amounts (over S/. 22,000 Soles). Any deficiency in fund management systems would soon lead to the funds' vanishing.

Finally, the share of sales in the investment indicates that if, on average, an investment of 29 centimos is needed to obtain an income of one Sol, the share of the potato crop in that investment is only 4 centimos, the barley crop's share is 12 centimos, wheat 6 centimos, and oats 5 centimos. Thus,

the most investment-efficient crop is barley, followed by wheat, fodder oats and potatoes, under similar conditions.

2.2 EVALUATION OF PROJECT EFFICIENCY

This section seeks to measure the impact of the Project, based on the criteria set down in the earlier chapter on the evaluation methodology.

This evaluation is based on the following indicators:

- Management of Objectives and Policies
- Permanent Analysis of the Environment
- Planning and Defining of Priorities
- Organization of Follow-up and Evaluation
- Adaptation of the Organizational Structure
- Institutional Coordination
- Internal Work Dynamics
- Effectiveness of Action
- Strategic Management
- Relationship with Beneficiaries
- Systematization of Experience
- Transferral of Results
- Replicability of Work.

This Project, overall, did not establish a clear management of objectives or policies to guide the work.

This is seen in the goal achievement. Many of the goals were overshoot which, rather than indicating an increased benefit, reflects a conflict between what the agency wants to do and what it is able to do. For example, the number of beneficiaries served was more than 44% above the planned goal, which meant making a greater effort to assist this additional population. Bearing in mind that the resources available were of a fixed amount, this meant that either the agency was unable to attend to all of the beneficiaries, or

it attended to them all, but with a lower yield.

Moreover, occurrences such as the purchase of bad seed indicate the failure to set down clear rules for handling problematic situations, since this could not have been due to a technical deficiency. The delays in distributing the inputs also indicate the absence of clear policies in this reference.

Analysis of the environment was carried out partially, but not permanently. The continual observations made by the Monitors in several of the offices regarding changes that should be made in plans due to local circumstances indicates the limitation existing in the need to give more careful attention to the environment.

Another aspect reflecting the absence of a clear view of the situation was the extension of the Project to cover more beneficiaries. Apparently the agency failed to analyze the implications of the situation of crisis: the fact that the farmers lived so far away that it would be impossible to attend to them, the limited resources, organizational problems, etc.

The planning and defining of priorities were not adequately managed. The field evaluation showed that in many cases the work was carried out solely in order to meet physical goals, without specific plans being made to ensure that these goals might become more permanent. The Monitors played a major role in defining the plans, adapting them, and detecting problems arising in the course of the project, which were not being corrected by the people responsible.

The organization of the follow-up and evaluation was limited, and in many cases it was very deficient. This project management activity was directed more toward verifying the achievement of goals rather than evaluating whether the methods used were the most appropriate.

The adaptability of the organization was a positive point in the execution of this Project. The agency set up work systems, developed from past experience, which enabled them to meet many of the goals, mainly thanks to their organization and the responsible attitude of their personnel.

Institutional coordination was also a positive factor in this Project. All the offices have mechanisms for coordination with other institutions, and these contacts enabled them to extend their serving capacity, integrate all efforts and

improve coverage levels.

With regard to internal work dynamics, one of the factors which made it possible for the Project to achieve a better yield was evidently the capability of the human resources involved in the work.

With reference to effectiveness of action, the foregoing points presented a series of indicators expressing good coverage of goals. Goal coverage was also mentioned at the beginning of this chapter, indicating the degree of effectiveness.

Strategic management became apparent when it was necessary to find solutions to some specific problems, but there were many deficiencies in this respect. Those responsible failed to adapt plans to circumstances, or to assimilate promptly the recommendations made by the Monitors, and situations were allowed to exist which made it impossible to work efficiently (for example, the fact that the inputs were not purchased as stipulated in the regulations). These deficiencies meant that several of the offices had great difficulty in achieving the Project goals.

The agency's relationship with the beneficiaries was favorable to the Project. CARITAS' experience in the area, and its permanent contact with the communities were important factors for optimum goal achievement, especially regarding the transfer of technology.

Although the agency handled adequately well the criteria of work effectiveness, it is also true of most of the CARITAS offices involved that adaptation to changes, the establishing of permanent guidelines in this reference and, in general, the establishing of clear management systems, were not their strong points.

They achieved their goals and, in many cases, overshot the numerical goal, but that did not necessarily mean that they had met the desired objectives or properly consolidated structures such as those of the revolving loan fund system.

The final result of the evaluation is that a high level of coverage was achieved, but that this needs to be reinforced so as not to lose the ground that has been gained. Reinforcement is needed in management aspects as well as technical production aspects.

It is important to note that different work was done in the

different project areas. The above analysis is an overall one, covering all the offices, whereas in fact each of the offices individually showed better results in the various different aspects.

3. CONCLUSIONS AND RECOMMENDATIONS

3.1 CONCLUSIONS

a) Technical Aspects

- CARITAS organized and implemented 183 committees, benefiting a total number of 25,456 poor families in Cuzco, Abancay, Chuquibambilla and Sicuani.
- The quantity of seed purchased represents 94.62% of the goal. However, 60% of the potato seed was not of sufficiently high quality as regards genetic or health aspects. The other seeds were certified ones.
- The quantity of fertilizers acquired was 32.45% over and above the goal, but its distribution was deficient.
- In Abancay, Chuquibambilla and Cuzco, the local committees played a key role in the control, supervision and execution of the irrigation infrastructure work.
- The monitoring work performed by the AID Adviser, and his recommendations on technical and administrative aspects, made it possible for some of the deficiencies to be remedied.
- The fact that the Project area being served by CARITAS was so large, with the communities so dispersed and, in some cases, inaccessible, prevented there being a better coverage of technical assistance.
- CARITAS managed a total area of 6,866.6 hectares sown with potatoes, wheat, barley, pulse, quinoa and vegetables. Production for consumption amounted to 7,281.36 mT and for fodder, 7,599.2 mT.
- With regard to budget execution, expenditure amounted to S/.1'131,550.29 (Soles), which was 13.4% over the budgeted amount of S/.998,187.50 (Soles). This was due to the increase in the prices of inputs and freight costs.

b) Financial and Administrative Aspects

- Organization for the execution of the Project was generally good. Supervision was very limited in CARITAS Sicuani due to the lack of adequate installed capacity for such an extensive and distant project area. The technical personnel in charge of project execution and the auxiliary personnel performed their work well.

c) Economic Aspects

- The potato crop is the one demanding the greatest investment.
- Production in the first year amounted to 14,880.56 mT, with an estimated value of S/.3'648,348 (Soles).
- Both economic and social criteria were used in selecting the crops.

d) Social Aspects

- The participation of the beneficiary population in the different project activities was extremely positive. Both men and women worked took part actively and responsibly in the series of field labors and other activities required by the project. The chance to obtain a variety of different seeds best adapted to their productive structure (multiple cropping and cattle-farming) with the facilities and support offered, under the existing conditions of extreme poverty, aroused the interest of a considerably larger population than had originally been planned in the goals.
- The Project strengthened the community organization by stimulating communal work and the holding of community assembly meetings to make the necessary decisions on Project-related matters. The Local Committee was the basic entity responsible for planning, executing and conducting the Project, selecting the beneficiaries, distributing and recovering the inputs, and administrating the revolving loan fund. Within each community organization, a project sub-committee was set up to give support in all local coordination work.
- The participants welcomed the introduction of the revolving loan fund of inputs for the 92/93 agricultural cycle, because they were lacking in seeds, and those offered by the Project for food crops and fodder crops

were compatible with their traditional farming and eating habits. They realized that the loan fund was an important means for them to reproduce and increase their productive resources, and extend the fund benefits to other members of the community. However, a large number of beneficiaries were of the opinion that the quantities of seed loaned to each family were insufficient.

- The participants perceived that their family incomes were higher this year, because their harvests, with the help of the Project, were better in quantity and quality than those of past years. This situation was more noticeable in the valleys and at intermediate ecological levels; and less noticeable at the higher altitudes.
- The Project had a direct effect on the family employment level in the communities, providing a greater volume of productive work on the land, and intensifying and diversifying the agricultural labor, on larger areas of cultivated land, because of the variety of seeds supplied.
- The beneficiaries said that they had obtained more food products this year, especially from their harvests, which are mostly for home consumption; supplemented to a small extent by their animal products, which were mostly sold. They also purchased some industrial foods. Their nutritional level improved slightly.
- A direct effect of the Project was that it reduced by over 75% the months/man of seasonal migration, because of the increased productive activity and employment that it created in these communities. Another significant effect was that it contributed to the "return migration" of some families from Chumbivilcas, Espinar and Andahuaylas.
- The women participated actively in all the field labors and Project-related assembly meetings. They realized that the Project was an important means of securing economic stability and food for their families. In spite of their high degree of participation in the productive activities, the women's contribution at the leadership and administrative levels was very limited, due to cultural constraints affecting the female population in the region.
- The general consensus among the beneficiaries is that the seed was delivered late, which meant that the crops

were exposed to the risk of frost. The beneficiaries feel the need for the Project to continue its support, to strengthen their capacity to replace their productive resources, and to be able to guarantee the families' food supplies. They say that they need more training; they need irrigation infrastructure work; and the implementation of social welfare services.

3.2 RECOMMENDATIONS

a) Technical Aspects

- Areas with access to irrigation should be selected for the production of potato seed using varieties resistant to fungal diseases, so as not to infest the local fields.
- The agency should have more professional and/or technical personnel so that it can provide more efficient support to production and avoid problems in the distribution of seeds and fertilizers.
- The sowing schedules should be well coordinated, so that all the necessary operations may be planned in good time.
- The peasant farmers should be encouraged to apply organic fertilizers (guano, farmyard manure, or green manure using lupine - Lupinus mutabilis), and to use environment-friendly methods of phytosanitary control.

b) Financial and Administrative Aspects

- The funding agency should provide the funds in good time and allocate a monitor/adviser from the outset of the project.
- The CARITAS Chuquibambilla office should be moved from Cuzco to Chuquibambilla, to enable the Project to work much more effectively.

c) Economic Aspects

- To guarantee an economic return for the peasant producers, integral support should be provided for their communities, namely: inputs, training, the construction of irrigation infrastructure, and livestock packages.
- The communities should continue to receive support in

the form of "food for work" programs, which have shown good results.

- The results of the economic evaluation justify the continuation of the Project, reinforcing the technical, economic and social aspects indicated in this report.

d) Social Aspects

In order to reinforce the progress made so far, and make self-development a viable process in the communities served by CARITAS-Sicvani, CARITAS-Chuquibambilla, and the high altitude communities served by CARITAS-Cuzco and CARITAS-Abancay, we recommend that a regular project be started immediately, to include the following activities and goals in its social component:

- The development of a program to motivate, advise and assist the peasant communities in the consolidation and adaptation of their communal organizations as elements which will dynamically conduct their socioeconomic development, based on their agricultural and livestock farming activities.
- The development of a training program to raise the beneficiaries' cultural and technical level, creating a social awareness which will motivate them to redouble their communal efforts to improve their living conditions. The women, in particular, should receive training to develop their potential for technical and administrative work and enhance their aptitude for organizing the agricultural and livestock farming activities.

The regular projects recommended should retain the technical teams who worked on this Emergency Project, reinforcing them with specialized technicians and social workers, and encouraging them to coordinate their activities closely. The participation of the Monitor is important, to provide guidance on technical and administrative aspects.

CHAPTER VII

TOTAL PROJECT EVALUATION

This chapter contains the conclusions of the evaluation of the total Project executed by the three Private Voluntary Agencies, ADRA/OFASA, CARE and CARITAS in eight Departments of Peru, to aid peasant families who had been affected by the drought in 1991 and 1992.

This evaluation includes an analysis of the technical, financial, administrative, economic and social aspects, applying the indicators described earlier, interpreted for the overall Project. It also analyzes the participation of each of the institutions in the global evaluation.

1. GOALS AND RESULTS

Table VII-1 gives the consolidated goals as planned and executed for the whole Project, and indicates the percentage of goal achievement for each of the activities. This complete view of the Project results indicates the effectiveness of project management and any failures to comply with project objectives. This important subject will be dealt with at greater depth in the section on technical aspects.

1.2 TECHNICAL ASPECTS

In different parts of the country, the executing agencies, ADRA/OFASA, CARE and CARITAS, provided seeds of guaranteed quality for the cultivation of cereals, pulse, vegetables and fodder crops. Problems were encountered with the potato crop because 60% of the seed was of poor quality, in both genetical and health aspects.

The three executing agencies purchased a total of 2,306 mT of seeds, representing 99.5% of the goal. They distributed 97% of the seeds bought, for reasons explained in the analysis of each agency's work.

Both chemical and organic fertilizers were purchased. CARITAS encouraged the producers to use guano and also recommended them to dig in green manure in impoverished soils. CARE and ADRA/OFASA used chemical fertilizers: urea, diammonium phosphate and, in smaller quantities, potassium chloride.

TABLE VII-1
CONSOLIDATED PROJECT GOALS AND PROGRESS

ACTIVITIES	UNIT	CARE			ADRA / DFASA			CARITAS			TOTAL		
		GOALS	EXEC.	% PROGRESS	GOALS	EXEC.	% PROGRESS	GOALS	EXEC.	% PROGRESS	GOALS	EXEC.	% PROGRESS
ORGANIZATION OF REVOLVING FUNDS	COMMITTEE	95	95	100.00	57	66	115.79		183		152	344	226.32
ACQUISITION OF INPUTS													
.SEEDS	aT	275.43	254.49	92.40	840.10	913.77	108.77	1282.11	1137.47	94.62	2317.64	2385.73	99.49
.FERTILIZERS	aT	287.60	131.00	45.83	383.53	816.54	212.93	291.65	385.65	132.23	962.78	1334.89	138.57
.MATERIALS (CEMENT)	aT							65.75	175.68	267.19	65.75	175.68	267.19
.VET. MEDICINES	PACKET	95	65	68.42							95	65	68.42
.VET. EQUIPMENT	NO	95	65	68.42							95	65	68.42
DISTRIBUTION OF INPUTS													
.SEEDS: Potato	aT	225.00	206.25	91.67	826.04	826.04	100.00	458.50	458.50	100.00	1589.54	1478.79	98.76
Wheat	aT							166.35	162.71	97.61	156.35	162.71	97.31
Barley	aT	24.00	23.16	96.50	14.00	14.00	100.00	321.96	328.20	99.45	359.96	357.36	99.28
Pulse	aT				18.07	18.07	100.00	60.71	59.51	98.02	78.78	77.58	98.48
Fodder Oats	aT	24.00	23.58	98.25				118.62	108.56	98.14	134.52	132.14	98.16
Corn	aT				4.15	4.15	100.00	61.26	18.88	17.76	65.41	15.83	22.78
Quinoa	aT							2.00	0.52	26.00	2	0.52	26.00
Pasture grasses	aT							6.00	6.00	100.00	6	6	100.00
Vegetables	aT							0.57	0.28	49.12	0.57	0.28	49.12
Alfalfa	aT	1.928	1.17	60.68							1.928	1.17	60.68
Dactylis	aT	0.505	0.33	65.35							0.505	0.33	65.35
.FERTILIZERS	aT	131.0	131.00	100.00	816.64	488.92	49.09	385.65	318.75	80.58	1334.89	843.47	63.22
.CEMENT	aT							175.68	175.68	100.00	175.68	175.68	100.00
.OTHERS: Citowet	Lts											113	
Inoculant	kg	950	151.8	15.98							950	151.8	15.98
CROPS SOWN													
.POTATO													
Sown	Ha	150.00	137.5	91.67	514.0	572.85	111.29	286	286.23	100.00	950	995.78	104.82
Harvested	aT		409.0		5140.0	1805.67	36.69		1469.82		3100	3763.69	73.22
.BARLEY													
Sown	Ha	200.00	193.0	96.50	80.0	78.00	87.50	3485.00	3173.20	93.19	3485.00	3436.20	93.25
Harvested	aT		2316.0		80.0	29.89	37.36		3543.17		80.00	5889.86	7361.33
.PULSE													
Sown	Ha				131.6	137.13	104.28	618.00	472.90	77.52	741.60	618.83	82.26
Harvested	aT				95.0	9.53	10.03		278.21		95.00	287.74	302.88
.FODDER OATS													
Sown	Ha	200.00	196.5	98.25				1125.00	1085.62	96.50	1325.00	1282.12	96.76
Harvested	aT		2358.0						7599.20			9957.28	
.CORN													
Sown	Ha				95.0	62.12	65.39	1527.00	187.00	7.81	1622.00	169.12	10.43
Harvested	aT				98.0	26.20	29.11		192.60		98.00	218.00	243.11
.QUINOA													
Sown	Ha							147.00	51.58	35.03	147.00	51.58	35.03
Harvested	aT								18.85			18.85	
.VEGETABLES													
Sown	Ha								119.00			119	
Harvested	aT												
.ASSOCIATED PASTURE CROPS													
Sown	Ha	380.00	15.25	5.83							380.00	15.25	5.82
Harvested	aT												
TOTAL AREA SOWN		850.00	542.25	63.79	828.6	841.3	102.52	7898	6866.6	75.54	18768.6	9258.15	76.67
TRAINING	PARTIC.		7169									17567	
TRAINING	NO	475	478	98.95	556	535	96.22				1831	1885	97.48
COMMUNITIES	NO	95	95	100	57	57	117.54	688	688	100	752	762	101.33
BENEFICIARY FAMILIES	NO	5132	5132	100	3558	3786	114.46	17578	25456	144.82	31268	48374	129.16
DISTRIB. OF TOOLS	NO				7458	1589	21.32				7458	1589	21.32
INSTALLATION OF WELLS:													
.Drilling	NO				58	17	34.88				58	17	34.88
.Equipping	NO				58	18	20.88				58	18	20.88

SOURCE : Consultant Group
(1) : Broad beans and peas, or broad beans and beans
(11): Fodder barley

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The agencies purchased a total of 1,334 mT of fertilizers, which was 38.6% more than the planned figure. The amount distributed was 843.47 mT, representing a goal achievement of 63.2%.

It should be noted that CARE gave assistance in livestock and animal health activities, supplying veterinary medicine and equipment; and that ADRA/OFASA drilled 17 of the 50 planned wells (34%), and should complete the rest by the end of September.

The agricultural tools and equipment purchased were of good quality, and suitable for use in the different project areas.

In most of the project areas, crops are dry-farmed (90%) and the remaining areas have access to irrigation (10%). To develop and extend the irrigated areas, ADRA/OFASA and CARITAS motivated the producers to do maintenance work on the irrigation infrastructure. CARITAS, in particular, played a decisive role in rehabilitating small irrigation works, benefiting approximately 4,284 families.

During the 1992/93 agricultural cycle, the crops were affected by frost and hailstorms. Of the 8,250 hectares sown, only 6,894 were harvested, meaning that 16% of the sown area was lost due to the adverse climatic conditions.

Productivity was also affected. Some of the crops were not sown at the proper time, and there was not an adequate fertilization program. Consequently, the crops' unit yields remained below their potential.

Technical assistance was given by the executing agencies using their own professional personnel and, in some cases, specialists from the Ministry of Agriculture and the universities. Committee members, community leaders and agricultural promoters received training in administrative organization, the management of revolving loan funds, soil conservation techniques, crop management, animal health and techniques for the selection and storage of products.

Revolving loan funds were provided for the 334 committees, benefiting 40,374 families from 762 communities.

It should be noted that ADRA/OFASA is training the beneficiaries in processing techniques to produce potato starch and dried potatoes, thus giving a better aggregate value.

Each of the three executing agencies drew up its own set of regulations to govern the revolving loan funds. The regulations define the objectives, valuation procedures, criteria for selection of beneficiaries, interest for fund recovery and penalties for non-compliance.

The AID Monitors/Advisers played an important role in the Project activities. Their permanent follow-up work in the project areas enabled them to become thoroughly familiar with the problems arising during the course of the Project, and to make pertinent recommendations.

1.3 FINANCIAL AND ADMINISTRATIVE ASPECTS

CARE-Puno administrated and supervised the Project efficiently, and is well organized. ADRA/OFASA, except for its Northern and Central Regional Offices, also administrated and supervised the Project well. The Project administration and supervision performed by CARITAS were adequate in general, except in CARITAS Sicuani which did not have sufficient installed capacity.

The correct purchasing procedures were followed by the three agencies. CARE-Puno handled the inputs properly, transporting them as soon as they were acquired, and then distributing them to the beneficiary peasant communities. The delay was due to the tardy reception of the financing. ADRA/OFASA, with the exception of Huancayo Zonal Office, handled the inputs well as regards transportation, storage and distribution. CARITAS also handled the inputs well.

CARE-Puno prepared and submitted the work plans and schedules and technical progress reports at the proper times, but not all their financial reports. ADRA/OFASA and CARITAS complied with all the reporting tasks.

CARE-Puno has photocopies of all its accounting documents properly filed. The originals are sent to CARE-PERU, the headquarters office that centralizes the information from all its regional offices nationwide. ADRA/OFASA, with the exception of Santa Cruz, Cajamarca, filed its documents properly. CARITAS administrated the project's financial accounts well.

The AID Monitors/Advisers had an acceptable participation in improving project administration and monitoring.

1.4 ECONOMIC ASPECTS

Total production for the 92/93 agricultural cycle is estimated at 21,914.87 mT, of which 9,641.64 mT correspond to food crops and 12,273.20 mT correspond to fodder crops. The estimated value for this first year amounted to S/.4'610,554 (Soles), broken down into S/.3'803,614 for food crops and S/.806,940 for fodder crops. CARITAS had the highest share: 68% of total production and 79.14% of total production value. See Table VII-2.

To analyze the operation of the revolving loan fund of inputs, the minimal area of land is maintained in the second cycle, and increased conservatively by 5%. Bearing in mind that for future cycles certified seed will have to be bought after selling the production obtained, it is expected that the yields will be higher than those reflected in each of the projected production tables.

The total investment executed by CARITAS and ADRA/OFASA amounted to S/.2'264,106.45 (Soles) of which CARITAS spent a total of S/.1'131,550.29. ADRA/OFASA had spent S/.1'132,556.16 up to August 31, 1993; and CARE's expenditure amounted to US\$ 582,149 up to June 30, 1993. In all three cases, the principal item was the inputs component, as expected.

The Project income is determined by estimating the production values based on the historical in-field prices for each of the Project areas. The resulting value for the 92/93 cycle is shown in Table VII-3.

Based on the results of the 92/93 cycle, five-year estimates were made on a projection of this Project, to evaluate its feasibility over a period which will make it possible to measure its impact realistically.

Income estimates were based on the assumption that the production would increase moderately due to a growth in crop productivity and, to a lesser extent, due to an increase in the area under cultivation. It is also assumed that the prices will remain constant, equivalent to historic averages.

The projected expenses maintain a similar structure to those of the 92/93 cycle. The only change is in the participation of operational expenses, due to a considerable increase in the technical assistance costs, since the Project seeks to consolidate its technology transfer activities.

TABLE VII-2
 ESTIMATED VALUE OF FIRST CYCLE
 CONSOLIDATED
 (IN SOLES)

EXECUTING AGENCY	AREA SOWN (Ha)		AREA HARVESTED (Ha)		PRODUCTION (MT)		VALUE (S/.)		
	FOR CONSUPTION	FOR FODDER	FOR CONSUPTION	FOR FODDER	FOR CONSUPTION	FOR FODDER	FOR CONSUPTION	FOR FODDER	TOTAL
CARE	137.50	404.75	137.50	389.50	409.00	4674.00	246000	46740	292740
ADRA/DFASA	841.30		547.72		1951.29		669466		669466
CARITAS	5780.76	1085.62	4733.78	1085.62	7281.35	7599.20	2888148	760200	3648348
TOTAL	6759.56	1490.37	5419.00	1475.12	9641.64	12273.20	3883614	886940	4610554

PREPARED BY : CONSULTANT GROUP

(*) : The following are included in Area Sown: fodder oats and barley, plus pasture crops.
 (**): Pasture crops are not included in Production, because they were lost.

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TABLE VII - 3

INVESTMENT PER SPECIFIC CROP AND OTHER INVESTMENTS

1. EXECUTED BY: ADRA/OFASA

OFFICE	DESCRIPTION	HAS. SOWN	COST OF CROP (S/.)
JULIACA	POTATO CROP	100	262,273
	GRAIN BARLEY CROP	30	18,557
	BROAD BEANS CROP	20	13,772
	TRANSPORTATION		6,829
	DRILLING/EQUIPPING OF WELLS		54,593
	SUBTOTAL		356,024
AREQUIPA	POTATO CROP	99	182,428
	GRAIN BARLEY CROP	40	33,185
	TECHNICAL ASISTANCE		1,533
	TRANSPORTATION		3,816
	SUBTOTAL		220,962
R. CENTRO	POTATO CROP	230	443,009
	CORN CROP	42	31,844
	BROAD BEANS CROP	54	41,653
	PEA CROP	13	8,608
	TRANSPORTATION		14,651
	SUPERVIS. AND ADMIN.		26,754
	TOOLS		762
	TECHNICAL ASSISTANCE		4,027
	SUBTOTAL		571,308
	CAJAMARCA	POTATO CROP	143
PEA CROP		50	31,327
CORN CROP		20	13,432
TECHNICAL ASISTANCE			441
TRANSPORTATION			284
ADMINISTRATIVE EXP.			5,359
TOOLS			1,623
SUBTOTAL			254,693
TOTAL			1,402,987

INVESTMENT PER SPECIFIC CROP AND OTHER INVESTMENTS

2. EXECUTED BY: CARITAS

OFFICE	DESCRIPTION	HAS. SOWN	COST OF CROP (S/.)
CUSCO	POTATO CROP	58	103,180
	WHEAT CROP	399	94,218
	BARLEY CROP	1382	360,547
	PULSE CROP	276	56,627
	VEGETABLE CROP	66	25,324
	TECHNICAL ASSISTANCE		13,399
	FERTILIZER NOT USED		16,495
	SEED NOT USED		3,290
	FREIGHT		18,900
	SUBTOTAL		691,980
CHUQUIBAM BILLA	POTATO CROP	26	39,598
	WHEAT CROP	6	60,644
	BARLEY CROP	315	82,224
	TECHNICAL ASSISTANCE		2,524
	IRRIGATION		
	INFRASTRUCTURE		10,865
	FREIGHT		14,906
	SUBTOTAL		210,761
ABANCAY	POTATO CROP	103	174,856
	WHEAT CROP	281	68,006
	BARLEY CROP	420	110,851
	PULSE CROP	39	7,815
	CORN CROP	107	25,285
	TECHNICAL ASSISTANCE		10,125
	FERTILIZER NOT USED		10,392
	SEED NOT USED		2,403
	FREIGHT		25,924
	SUBTOTAL		435,657

SICUANI	POTATO CROP	99	193,338
	WHEAT CROP	635	151,009
	BARLEY CROP	1056	275,727
	PULSE CROP	158	38,282
	F. OAT CROP	1086	228,523
	QUINOA CROP	51	13,589
	PASTURE CROP	164	60,362
	VEGETABLE CROP	53	24,047
	FERTILIZER NOT USED		3,027
	TECHNICAL ASSISTANCE		11,069
	FREIGHT		33,243
	PROJECT MANAGEMENT		5,435
	SEED NOT USED		44,749
SUBTOTAL		1,082,400	

INVESTMENT PER SPECIFIC CROP AND OTHER INVESTMENTS

3. EXECUTED BY: CARE.

Chapter IV, Table IV-3A

Based on the above-mentioned data, a first quantitative evaluation was made to measure the impacts of the Project's quantitative results, using profitability indicators.

To determine project profitability, two basic indicators were used: the cost/benefit ratio, and the internal return rate. The former was considered the principal means of evaluating the effectiveness of goal achievement, since it is more accurate for this type of project.

The IRR is analyzed for reference only. In projects like this, which are mainly to help the beneficiaries to build up a working capital, this is not an indicator which gives homogeneous values, and therefore it is not possible to establish a very reliable consolidated indicator per institution.

These indicators were calculated for three stages of the Project. The first ratio established was the ratio of benefits obtained from the agricultural cycle versus investments made, in order to evaluate the direct effect of the initial funding. The second calculation was of the same ratio, but for the first projection period. The third referred to the evaluation of the five years projected.

In each case, the payment of labor is considered within the costs item. Although it is not a cash expenditure, it is a real value to be assumed in order to attain the benefits of the Project.

The results obtained for the whole Project on the basis of these indicators are:

For the 92/93 cycle:	4610554/4138080:	1.11
For the first year projected:	7023681/7125789:	0.99
For the five years projected:	35075509/33973073:	1.03

This indicates that for the 92/93 cycle, the Project had quite a good result (for each Sol invested, the beneficiary communities obtained 11 additional céntimos). However, this result is biased in that the indicator for CARITAS is much higher than for the other two agencies and is not completely accurate. The structure of this index will be analyzed below in further detail.

The above calculations are based on Tables VII-4 and VII-5.

TABLE VII - 4

ECONOMIC FLOW OF GLOBAL PROJECT

1.- Agricultural Cycle 92/93

1.1.- Considering the total amount of financing

AGENCY	AREA SOWN (Ha)	INCOME FROM SALES (S/.)	OPERATIONAL EXPENSES (S/.)
CARE	542.25	292740	454730
ADRA/OFASA	841.30	669466	1132556
CARITAS	6866.38	3648348	1131550
TOTAL	8249.93	4610554	2718836

INCOME-EXPENDITURE COEFFICIENTS

C/B TOTAL = 1.70

C/B CARE = 0.64

C/B ADRA = 0.59

C/B CARITAS = 3.22

1.2.- Including investment in labor, and excluding expenses which have no counterpart.

AGENCY	TOTAL EXPENSES	NON REIMBURSABLE EXPENSES	LABOR EXPENSES	NET INVESTMENT
CARE	454730		98070	552800
ADRA/OFASA	1132556		188653	1316065
CARITAS	1131550		1007375	2269215
TOTAL	2718836		1294098	4138080

INCOME-EXPENDITURE COEFFICIENTS

$$\text{B/C TOTAL} = \frac{4610554}{3652069} = 1.11$$

$$\text{B/C CARE} = \frac{4138080}{292239} = 0.53$$

$$\text{B/C ADRA} = \frac{669466}{1316565} = 0.51$$

$$\text{B/C CARITAS} = \frac{3648348}{2269215} = 1.61$$

2.- For the first year projected

AGENCY	AREA SOWN (Ha)	INCOME FROM SALES (S/.)	OPERATIONAL EXPENSES (S/.)
CARE	545.3	474706	560748
ADRA/OFASA	830.0	1622293	1642267
CARITAS	6855.0	4926682	4922782
TOTAL	8230.3	7023681	7125797

INCOME-EXPENDITURE COEFFICIENTS

$$\text{C/B TOTAL} = \frac{7023681}{7125797} = 0.99$$

$$\text{C/B CARE} = \frac{474706}{560748} = 0.85$$

$$\text{C/B ADRA} = \frac{1622293}{1642267} = 0.99$$

$$\text{C/B CARITAS} = \frac{4926682}{4922782} = 1.00$$

3.- For the five years projected

AGENCY	PRESENT VALUE	
	INCOME	EXPENDITURE
CARE'	3549774	3252190
ADRA/OFASA	9314801	8349842
CARITAS	22210934	22371041
TOTAL	35075509	33973073

INCOME-EXPENDITURE COEFFICIENTS

$$C/B \text{ TOTAL} = \frac{35075509}{33973073} = 1.03$$

$$C/B \text{ CARE} = \frac{3549774}{3252190} = 1.09$$

$$C/B \text{ ADRA} = \frac{9314801}{8349842} = 1.12$$

$$C/B \text{ CARITAS} = \frac{22210934}{22371041} = 0.99$$

TABLE VII - 4A

Investments and Benefits

92 - 93 Cycle

Agency	Office	Investment	Benefit	B/C Ratio
CARE	Puno	552,800(1)	292,740	0.53
	Subtotal	552,800	292,740	0.53
ADRA/OFASA	Juliaca	269,102(2)	233,280	0.87
	Arequipa	220,962	165,410	0.75
	Central R.	571,308	203,026	0.35
	Cajamarca	254,693	67,750	0.27
	Subtotal	1,316,065	669,466	0.51
CARITAS	Chuquibambillas	199,896(3)	290,931 (a) 299,511 (b)	1.45 1.50
	Cusco	672,195(4)	1,394,018 (a) 1,674,557 (b)	2.07 2.49
	Sicuani	974,262(5)	1,313,293 (a) 1,439,315 (b)	1.35 1.48
	Abancay	422,862(6)	650,106 (a) 765,470 (b)	1.54 1.81
	Subtotal	2,269,215	3,648,348 (a) 4,178,853 (b)	1.61 1.84
TOTAL		4,138,080	4,610,554 (a) 5,141,059 (b)	1.11 1.24

- (1) Not including animal health expenses.
- (2) Not including expenditure on the drilling and equipping of wells, or the barley and broad bean crops.
- (3) Not including irrigation infrastructure expenses.
- (4) Not including expenditure on unused seed and fertilizers.
- (5) Not including expenditure on unused seed and fertilizers or pasture crops expenses.
- (6) Not including expenditure on unused seed and fertilizers.

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NET ECONOMIC FLOW OF THE PROJECT

AGENCY	ITEM	YEARS					
		0	1	2	3	4	5
MARE	Benefit		474706	671296	936858	1295719	1569545
	Cost	560741	679685	808026	962036	999939	
	Balance	(560741)	(204979)	(136730)	(25178)	295780	1569545
MADRA/OFASA	Benefit		1622293	1998802	2502968	3043739	3589272
	Cost	1642267	1805271	2012307	2248809	2509164	
	Balance	(1642267)	(182978)	(13505)	254159	534575	3589272
MARITAS	Benefit		4926682	5452716	5997671	6503071	6889652
	Cost	4922783	5190139	5470320	5637492	5817591	
	Balance	(4922783)	(263457)	(17604)	360179	685480	6889652
	NET BALANCE	(7125791)	(651414)	(167839)	589160	1515835	12048469

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The internal return rate for the whole project, using the formula described in Chapter IV, was 13.7%.

This indicator has a value higher than the cost of the capital (10%), a result which shows that the benefit of the Project is superior to any investment alternative generated in agriculture. This result is correct, since the Project under analysis is a project to make production more operational, where investments are turned into benefits very quickly (at the end of a cycle), whereas investment projects require a longer maturing period before the investment amount is recovered.

The earlier remarks make it apparent that this is not the best indicator by which to evaluate the Project's yield, because it is difficult to establish a level of comparison. This is why the cost/benefit ratio is used as the most suitable criterion for this type of project. See Table VII-6.

1.5 SOCIAL ASPECTS

The peasants participated effectively and enthusiastically in the field labors and all other Project-related activities. This participatory attitude was due to the fact that, in their situation of dire poverty, the peasants attached great importance to the aid given in the form of seeds and other inputs, the training offered, and the possibility to continue and extend this means of in-kind capitalization.

Quite apart from the project management and the indications given during its execution, the subsistence communities of the Altiplano region of Puno and the high-Andean areas of Huancayo, Tayacaja, Abancay, Cuzco and Sicuani showed a real vocation for hard work and cooperation, reflecting their traditional custom of communal work in response to climatic risks. ADRA/OFASA carried out effective promotion work, motivating impressive number of peasants from the Santa Cruz, Caylloma, Tayacaja and Huanta communities to participate. The prestige gained by CARITAS played a vital role in motivating the huge peasant population from the communities located in Chuquibambilla, Andahuaylas and Sicuani.

The tradition of close-knit communal organization which continues to exist in Huancayo, Tayacaja and Juliaca, served by ADRA/OFASA; Puno, served by CARE; and the high-lying communities of Abancay, Chuquibambilla, Cuzco and Sicuani served by CARITAS, made it easy for these communities to

TABLE VII - 6

C/B COEFFICIENTS PER AGENCY - CONSOLIDATED

Agency	Location	C/B 92-93		C/B Year 1 (3)	B/C Year 1-5(3)
		(1)	(2)		
CARE - Perú	Puno	0.64	0.53	0.85	1.09
ADRA/OFASA	Arequipa	0.92	0.75	1.10	1.21
	Juliaca	0.74	0.87	1.26	1.32
	Región Centro	0.45	0.35	0.95	1.05
	Cajamarca	0.36	0.27	0.80	1.00
Caritas	Sicuani	1.42	1.35	1.01	0.99
	Cusco	5.21	2.07	0.96	0.98
	Chuquibam.	2.89	1.45	1.00	0.99
	Abancay	2.29	1.54	1.08	1.03

(1) Not including labor expenses

(2) Based on the Consultand Group's estimates as regards the values for Caritas

(3) Including labor expenses

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adapt to Project requirements and activities, and to assimilate the Project committees and/or sub-committees as well as other mechanisms for internal organization.

In the case of the communities located in the Santa Cruz, Huanta and Caylloma areas, where the communal organization had become weakened, the Project, as applied by ADRA/OFASA, had the effect of strengthening their organizational structure. The orientation provided by CARITAS was also a positive stimulus to the communal work and activities of the communities served by this agency.

The Project committees (CARE and ADRA/OFASA) worked effectively within the framework of the community organization, performing their functions of administration of the revolving loan fund and coordination of activities within each community. Members of these committees are elected by, and report to, the Community Assembly.

CARITAS set up Local Committees, one per District responsible for planning and executing the Project. These select the beneficiary communities and administrate the revolving loan funds at the local level. A Project Sub-Committee, which also reports to the Community Assembly, was set up in each community, to conduct and coordinate activities within the community. In most cases, the President of the Sub-Committee was the community representative on the Local Committee.

The members of the beneficiary communities welcomed the introduction of the revolving loan funds containing the inputs needed for the agricultural cycle. They were in such a critical situation that they did not have any seed for the 92/93 cycle; and they were pleased that the seed varieties offered for food crops and fodder crops coincided with their farming customs and eating habits.

The beneficiaries expressed their agreement with the conditions established for the distribution and repayment of the loans. They were aware of the importance of maintaining and extending the scope of the revolving loan fund as a means of reproducing their production resources. In Puno especially (CARE's project area) the loan fund system was in keeping with the beneficiaries' experience of communal production work.

Large numbers of the beneficiaries were of the opinion that the quantities of seed distributed to each family were not enough since some areas of land had had to be left uncultivated. This opinion was the most widespread in

Chuquibambilla and Sicuani, belonging to the CARITAS project area. In Huanta and Santa Cruz (ADRA/OFASA) some small groups of participants disagreed with the interest to be paid in the revolving loan fund.

The Project produced relative increases in the family incomes, mainly because of the improved harvests. This was seen more in the valleys and at the intermediate altitudes, principally in the area managed by CARITAS. Groups of beneficiaries for Santa Cruz, Caylloma and Huanta (ADRA/OFASA) said that the increases in their family incomes were lessened by the adverse climatic conditions and pests which reduced their harvests.

The Project also created significantly more employment for the family labor force in the communities, since the areas of land under cultivation increased, and there was more agricultural work as well as livestock work, administrative and training work promoted by the Project. This effect was reinforced by ADRA/OFASA in Juliaca with the work on the water wells, and in Huancayo, Tayacaja and Huanta, where other regular infrastructure projects became integrated. CARE, with its veterinary component also contributed to absorbing additional family labor in the communities.

The Project made it possible for the beneficiaries to obtain relatively more food for their families, both from their own agricultural production, which they use mostly for home consumption, and from their increased incomes, thereby improving their nutritional level. This effect was reinforced to a small extent by their livestock production, mostly in Puno (CARE and ADRA/OFASA) and Sicuani (CARITAS).

An immediate effect of the Project was to reduce the numbers of peasant migrants and the length of time spent away from their communities. It is estimated that in Puno (CARE) and Santa Cruz, Huancayo, Tayacaja, Huanta, Caylloma and Juliaca (ADRA/OFASA), the number of months-men of seasonal migration dropped by over 70%; in the areas of Abancay, Chuquibambilla, Cuzco and Sicuani (CARITAS), the reduction was over 75%. This was a result of the Project's having stimulated productive activities and other occupations inside the communities.

Another significant effect was that it contributed to the return migration and reincorporation into the farming activity of some families from Chumbivilcas, Espinar, Andahuaylas and Huanta, who had previously left their communities due to socio-political problems.

The women's participation and constancy in the productive activities and other Project-related work were significant, reflecting their interest in the Project and the importance they attached to the resources and training it offered, as a means of guaranteeing economic and dietary stability for their families. Since the women play a leading role in the internal organization of the family productive unit, their work load increased with the introduction of the Project.

The men and women worked equally hard in the farming activities, but it was mainly the men who carried out the leadership and administrative tasks. The women's presence at this level was practically nil in Santa Cruz and Juliaca, and negligible in Chuquibambilla, Abancay, Cuzco, Sicuani and Puno. This is linked with their lower level of school education and their lack of access to technical training. However, in Caylloma, Huancayo and Huanta, the women did take part in leadership and project committees. In Huanta, in particular, the women's behavior was exceptional, showing great fortitude and dedication in their efforts to meet the Project requirements as part of their strategy for survival in the face of the social problems prevalent in the area.

The community leaders and members were unanimous in their satisfaction with the Project and its results, because it had provided them with help in the form of inputs for their agricultural work at a particularly difficult time; it had offered them a chance to improve and capitalize their production using their own efforts, and it had created more productive work in their committees. They appreciated the increased supply of food from their own production and the introduction of the revolving seed fund which they viewed as a guarantee that they would be able to continue sowing crops in future agricultural cycles. There has been a change of attitude in the beneficiary communities; they no longer show such uncertainty in facing up to their situation of poverty.

2. PROJECT EVALUATION

2.1 EVALUATION OF RESULTS

The following evaluation is based on a set of numerical indicators which seek to measure the effectiveness of the work carried out by the three offices responsible. The indicators applied are:

The cost/benefit ratio, described in point 1.3, which expresses the level of coverage of a project's costs.

- The investment/beneficiary ratio, which indicates the effort made by the project for each family served.
- The beneficiary/technician ratio, measuring the degree of coverage of one technician to assist the number of families specified.
- The hectares/beneficiary coefficient, indicating the degree of land per family.
- The hectares/technician coefficient, expressing the degree of coverage of a technician in technical assistance.
- The beneficiaries/committee coefficient, which seeks to evaluate the level of concentration of the revolving loan fund committees.
- The beneficiaries/trained personnel indicator, which enables us to analyze the effort to be made in order to replicate the knowledge acquired by each person attending a course.
- The area harvested/area sown ratio, which measures the degree of effectiveness in crop management.
- The total sales/committee ratio, indicating the degree of commercial turnover that the committees may have.
- The share of income in the investment, which measures the effort needed in order to obtain one unit of income.

The basic concept is that a one hundred per cent goal coverage does not necessarily mean that the objectives have been met, and it is therefore necessary to establish other means of defining the real degree of coverage of objectives or the distortions which prevent the goals being met.

The following results were obtained from the above indicators for the total Project.

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QUANTITATIVE EVALUATION INDICATORS

Indicator	Result
- C/B Ratio: 92/93	1.11
Five years	1.03
- Investment/Beneficiary	69.32
- Beneficiary/Technician	1,187
- Hectares/Technician	185.5
- Hectares/Beneficiary	0.2
- Beneficiaries/Committee	117
- Beneficiaries/Trained Personnel	40
- Area Harvested/Area Sown	0.838
- Total Sales/Committee	S/.14,942
- Share of Income	
in Investment:	
Total	S/.0.54
Potato sales	S/.0.149
Barley sales	S/.0.173
F. Oats sales	S/.0.105

In many cases, these results give indices contrary to positive Project achievements, and in some cases they give warning signs of dangers which can affect the functioning of the Project in the future. See Tables VII-7 and VII-8.

The C/B coefficient gives an acceptable result for: the 92/93 cycle and for the five-year projection, which means that the Project will at least maintain the capitalization level of the different productive activities.

The second coefficient (Investment/Beneficiary) gives a very low value: a contribution of only 70 Soles per family served. This indicates either that the effort made is being diluted too much, or that the Project is failing to attend to families in order to attain other specific goals.

The beneficiaries per technician figure also give a warning signal, since a Project coverage of 1,187 families per technician means that it is practically impossible to give technical assistance. Even if adequate program is set up to

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TABLE VII - 7

CONSOLIDATED INVESTMENT COEFFICIENTS PER AGENCY

Agency	Location	Invest.	Income	Inv./ Benef	Inv./Has.	Inv./ Income
CARE - Perú	Puno	454006	292740	88.46	861.49	1.55
ADRA/OFASA	Arequipa	180332	165410	120.22	1297.35	1.09
	Juliaca	314025	233280	215.23	2093.50	1.35
	Región Centro	449432	202216	84.07	2328.66	2.22
	Cajamarca	188767	67750	127.46	2483.78	2.79
Caritas	Sicuani	508290	1439315	36.31	220.71	0.35
	Cusco	314229	1674557	43.64	158.62	0.19
	Chuquibam.	103650	299511	43.42	173.32	0.35
	Abancay	286133	765470	153.09	305.04	0.37
Total		2798864	5140249	69.32	443.8	0.54

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TABLE VII - 8

CONSOLIDATED CAPACITY COEFFICIENTS PER AGENCY

Agency	Location	Benefic.	Technic.	Has. Harvested	Benef/Tec	Has/Benef	Has/ Technic.
CARE - Perú	Puno	5132	6	527	855	0.1	87.8
ADRA/OFASA	Arequipa	1500	2	139	750	0.09	69.5
	Juliaca	1459	6	150	243	0.1	25.0
	Región Centro	5346	6	193	891	27.7	32.2
	Cajamarca	1481	2	76	740	0.05	38.0
Caritas	Sicuni	14000	2	2303	7000	0.16	1151.5
	Cusco	7200	4	1981	1800	0.27	495.2
	Chuquibam.	2387	2	598	1193	0.25	299.0
	Abancay	1869	4	938	467	0.5	234.5
Total		40374	34	6307	1187	0.2	185.5

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train new promoters, the final result will still be critical.

With regard to the hectares/technician coefficient, this indicator is complementary to the previous one, and also indicates the difficulty there would be if each technician had to supervise the crops (185 hectares). The attention density would continue to be high even if the work were done with a team of promoters, and the results of the supervision would be practically nil.

The hectares/beneficiary coefficient indicates a serious development problem for the area. The fact that each family has only 0.2 hectares means that it will be impossible to improve the crop productivity, however much technical or financial aid is given.

The average number of beneficiaries served by a committee is 117, which means that each committee must be well structured if it is to control the credit operations of such a large number of users.

Regarding the teaching effort to be made by each trained person in the community, the value is reasonable (40 families). However, this means that each trained person must have the ability and the necessary resources to communicate what he has learned.

Coverage of the area harvested can be considered within acceptable limits in other crops, especially bearing in mind the various difficulties that occurred during the course of the Project.

Potential sales per committee indicate the need to set up stable, well managed mechanisms to administrate these amounts over S/.14,000 Soles

Finally, the share of sales in the investment indicates that if, on average, an investment of 54 céntimos is needed to obtain an imcome of one Sol, the share of the potato crop in that investment is only 15 céntimos, the barley crop's share is 17 céntimos, and oats 10 céntimos. Thus, the most investment-efficient crop is barley, followed by potatoes, with oats in the third place.

2.2 EVALUATION OF PROJECT EFFICIENCY

This section seeks to measure the impact of the Project, based on the criteria set down in the earlier chapter on the evaluation methodology.

CUADRO Nº VII - 9

STRUCTURE OF ESTIMATED VALUE OF TOTAL SALES

92/93 AGRICULTURAL CYCLE

CROP	A G E N C Y			
	CARE S/. (%)	ADRA/OFASA S/. (%)	CARITAS S/. (%)	TOTAL S/. (%)
Potato	246000 (43.8)	645678 (95.4)	602205 (14.4)	1493883 (27.5)
Barley	23160 (4.1)	8970 (1.3)	1697525 (40.6)	1729655 (31.9)
Wheat			823426 (19.7)	823426 (15.2)
Pulse		90	168632 (4)	168722 (3)
Vegetables		3438 (0.5)		3438 (0.1)
Fodder Oats	292740 (52.1)		760200 (18.2)	1052940 (19.4)
Quinoa			18190 (0.4)	18190 (0.3)
Pasture Crops				
Corn		18480 (2.7)	108675 (2.6)	127155 (2.3)
TOTAL (S/.) (%)	561900 (100)	676656 (100)	4178853 (100)	5417409 (100)

TABLE VII - 10

COEFFICIENTS OF INVESTMENT SHARE IN SALES

TOTALES

$$\text{Potato share in investment} = \frac{1493883}{5417409} \times 0.54 = 0.15$$

$$\text{Barley Share in investment} = \frac{1729655}{5417409} \times 0.54 = 0.17$$

$$\text{Fodder oats in investment} = \frac{1052940}{5417409} \times 0.54 = 0.10$$

CARE

$$\text{Potato share in investment} = \frac{246000}{561900} \times 1.55 = 0.68$$

$$\text{Barley Share in investment} = \frac{23160}{561900} \times 1.55 = 0.06$$

$$\text{Fodder oats in investment} = \frac{292740}{561900} \times 1.55 = 0.81$$

CARITAS

$$\text{Potato share in investment} = \frac{602205}{4178853} \times 0.29 = 0.04$$

$$\text{Barley Share in investment} = \frac{1697525}{4178853} \times 0.29 = 0.12$$

$$\text{Wheat Share in investment} = \frac{823426}{4178853} \times 0.29 = 0.06$$

$$\text{Fodder oats in investment} = \frac{760200}{4178853} \times 0.29 = 0.05$$

ADRA/OFASA

$$\text{Potato share in investment} = \frac{645678}{676656} \times 1.69 = 1.61$$

$$\text{Wheat Share in investment} = \frac{18480}{676656} \times 1.69 = 0.05$$

This evaluation will be based on the following indicators:

- Management of Objectives and Policies
- Permanent Analysis of the Environment
- Planning and Defining of Priorities
- Organization of Follow-up and Evaluation
- Adaptation of the Organizational Structure
- Institutional Coordination
- Internal Work Dynamics
- Effectiveness of Action
- Strategic Management
- Relationship with Beneficiaries
- Systematization of Experience
- Transferral of Results
- Replicability of Work.

This Project, overall, did not establish a clear management of objectives or policies to guide the work.

Thus, what might be considered to be a greater benefit - (the number of beneficiaries surpassing goal figures) reflects a lack of clarity in Project planning. The objective was not to attend to a greater number of families, but to attend to the planned families well.

Moreover, occurrences such as the purchase of bad seed indicate the failure to set down clear rules for handling problematic situations, since this could not have been due to a technical deficiency. The delays in distribution of the inputs also indicate the absence of clear policies in this reference.

Analysis of the environment was carried out partially, but not permanently. The continual observations made by the Monitors in several of the offices regarding changes that should be made in the plans due to local circumstances indicates the limitation existing and the need to give more

careful attention to the environment.

The planning and defining of priorities were not adequately managed. The field evaluation showed that in many cases the work was carried out solely in order to meet physical goals, without specific plans being made to ensure that these goals become more permanent. The Monitors played a major role in defining the plans, which probably indicates that several of the offices were incapable of developing their own plans and strategies.

The organization of the follow-up and evaluation was limited, and in many cases it was very deficient. This project management activity was directed more toward verifying the achievement of goals rather than evaluating whether the methods used were most appropriate.

The adaptability of the organization was a positive point in the execution of this Project. The agency set up work systems, developed from past experience, which enabled them to meet many of the goals, mainly thanks to their organization and the responsible attitude of their personnel.

Institutional coordination was also a positive factor in this Project. All the offices have mechanisms for coordination with other institutions, and these contacts enabled them to extend their service capacity, integrate all efforts and improve coverage levels.

With regard to internal work dynamics, one of the factors which made it possible for the Project to achieve a better yield was evidently the capability of the human resources involved in the work.

With reference to effectiveness of action, the foregoing points presented a series of indicators expressing good coverage of goals. Goal coverage was also mentioned at the beginning of this chapter indicating the degree of effectiveness.

Strategic management became apparent when it was necessary to find solutions to some specific problems, but there were many deficiencies in this respect, for example, the failure to adapt plans to circumstances, or to assimilate promptly the recommendations made by the Monitors; also, the fact that negative situations were allowed to exist (for example, the harvested potatoes that were infested should have been sold immediately, etc.).

The three agencies maintained a good relationship with the beneficiaries; this was a favorable project indicator. Their experience in the area, and their permanent contact with the communities (technicians living in the beneficiary communities) were important factors for optimum goal achievement, especially as regards the technology transfer.

Although the agencies handled adequately well the criteria of work effectiveness, it is also true that adaptation to changes, the establishing of permanent guidelines in this reference, and, in general, the establishing of clear management systems, were not their strong points.

Project goals were achieved but this did not necessarily mean that the desired objectives had been met, nor that systems such as the revolving loan funds had become well consolidated.

The final result of the evaluation is that a high level of coverage was achieved, but that this needs to be reinforced so as not to lose the ground that has been gained. Reinforcement is needed in management aspects as well as technical production aspects.

3. CONCLUSIONS AND RECOMMENDATIONS

3.1 CONCLUSIONS

The evaluation carried out has made it possible to identify the following results of the project execution, grouped according to the evaluation criteria applied:

a) Technical Aspects

With AID funding the executing agencies organized and implemented 344 committees, benefiting a total number of 40,374 families living in 762 communities under conditions of extreme poverty.

- The cereal, pulse, vegetable and fodder seeds purchased were of the specified quality as regards genetic and health aspects. However, only 40% of the potato seed was of the required quality, as there was not enough good-quality seed on the market.
- The volume of seed acquired was 2,306 mT, representing 99.5% goal achievement. The volume distributed was 2,244 mT, or 97% of the goal.

- The quantity of fertilizers acquired was 38.6% above the goal figure. However, due to the unfavorable conditions only 63% of them were distributed. At present there is a stock which will guarantee a good fertilization program for the next agricultural cycle.
 - The agricultural equipment and tools purchased will be used in the coming agricultural cycle. Higher productivity is therefore expected, since the producers will be better equipped.
 - The work done on rehabilitation of the irrigation infrastructure has made it possible to extend the irrigated area, and this will result in an increased productivity of the crops conducted under that system.
 - Technology transfer activities motivated the producers to use certified seed, apply both chemical and organic fertilizers, and implement animal health programs. In some cases, they understood the importance of processing and preserving part of their production.
 - Community leaders, project administrators and agricultural promoters were trained in aspects of organization, administration and management of revolving loan funds.
 - The monitoring carried out permanently by the AID advisers resulted in their making recommendations which rendered the project activities more dynamic and therefore improved project management and benefits.
 - The results were not uniform in all the project areas. In some cases both the goal achievement and effects of the project were very positive and yet, within the same agency, responses on other points were deficient.
 - The training was not uniform in basic aspects, nor was it inserted into an integrated program, except in some specific cases.
- b) Financial and Administrative Aspects**
- In general, the three agencies organized and supervised the Project efficiently.
 - The three agencies had professional and technical personnel, and showed both ability and vocation in their work.

- The correct purchasing procedures were followed by the three agencies.
- Project documents were properly filed in all three agencies.
- The coordinated project management and follow-up system provided important experience for future work of a similar nature. By making use of the organization of the APVs, it was possible to achieve an extensive radius of action, reducing costs as regards logistics, project organization and relationship with the population to be served.

The executing agencies have been working for years in the Project areas. Therefore, executing the Project through these institutions meant a faster goal coverage in spite of the existence of strong limiting factors.

The relationship with peasant communities is always a delicate one as regards gaining their acceptance of a project. It is not easy, due to sociocultural characteristics. But in this case the project-community integration was achieved quickly (in less than a year), because the peasants already had confidence in the APVs.

- The capacity of the agencies involved proved insufficient to cope with the needs of such a large beneficiary population. The agencies redoubled their efforts, but thereby lost in efficiency.

The total number of families who actually benefited from the Project was 40,374, much higher (29%) than the original goal of 31,260 families.

This result is in contrast to the capacity of the agencies which, between the three of them, have fewer than fifty professionals among their technical human resources. Thus, although they had adequate schedules to train members of the communities as promoters to help them in their work, it was impossible for them to cover the total demand of the population accepted as beneficiaries.

This contradiction between the excess of population served and the limitation in the human resources available to execute the project, either means that the actual levels of coverage are lower, or that the work is performed much less efficiently.

- Adjustments had to be made to the original plans because of delays in the arrival of resources (funding and inputs) to the agencies.

It is obvious that the delay in the delivery of the funds needed to buy the inputs was a determining factor for goal achievement. The delay meant that the purchases were made late and also that it was not possible to obtain the best quality seeds. In many cases, the only seed available was of fair or poor quality, and this, added to the bad climatic conditions, magnified the negative effect of the delay.

Projects dealing with agriculture cannot be rescheduled. There is only one agricultural schedule, and its dates have to be respected.

- Technical and organizational capacities were not handled according to uniform criteria which allow an integral evaluation to be made.

In many cases, the project management criteria had been set up by each of the agencies individually, and, what is more, by each individual office, making it very difficult to carry out an integral evaluation which would have permitted the systematization of the whole experience.

- The Monitors played a very important role in the follow-up and identification of solutions to management problems.

Nevertheless, this support could have been more decisive if there had been a larger team covering more points, who could have detected problems and solved them before they became serious.

c) Economic Aspects

- The total estimated value of production from the 92/93 cycle is S/.4'610,554 (Soles). Total production amounted to 21,914.84 mT, of which 9,641.64 mT were food crops and 12,273 mT were fodder crops.
- The harvests resulted in profits for the peasant producers. Although not always significant, these profits enabled the beneficiaries to have food and to store seed for the next agricultural cycle.

d) Social Aspects

- The peasants participated actively and responsibly in all the Project-related farming and training activities, motivated by the importance they attached to the components, which coincided with their traditional production system and eating habits.
- The communal organization, stimulated and strengthened by the executing agencies, served as a basis for the Project development. The project committees adapted to the project requirements and did their work well.
- The revolving loan funds were amply accepted by the community members, and created great expectation. They were viewed as a means of guaranteeing the future provision of inputs and the continuity of their farming activities.
- In general, the Project produced slight increases in the family incomes, resulting from the improved harvests of food and fodder crops. There was also more food available for the families, principally from their own production.
- The families' farming activities were intensified, since larger areas of land were being cultivated. The seasonal peasant migration was reduced by over 70% as regards the combined factors of frequency of migration and length of time spent away from the community.
- The women's contribution to the Project-related farm labors was significant. They showed great interest and expectations, since they realized that the Project would guarantee greater economic and alimentary security for their families. Women's participation at leadership and committee levels was limited.

3.2 RECOMMENDATIONS

- Strengthen the revolving loan funds which have proved to be lasting, to consolidate their operations in technical, economic and administrative aspects.
- Help the communities to establish systems for the provision of inputs and the sale of products. Such mechanisms will give the revolving loan fund committees a greater degree of autonomy and reduce their risk levels as their incomes increase.

- Make use of the technical, managerial and operational capacity of the PVA offices which did the best work in the execution of the Project under evaluation.
- Provide integral assistance, to maintain and raise the capitalization of the productive activity in the most depressed areas.
- Reinforce the capacity of the executing agencies in order to improve their levels of technical and management efficiency, lowering project operation costs, and reducing the levels of risk as specific goals are met.
- Improve the mechanisms for the operation of the revolving loan funds, simplifying them so that they can be handled autonomously by the respective communities.
- Set up a system for the follow-up and evaluation of projects, to establish permanent mechanisms for the timely correction of distortions which may arise.
- The responses of the peasant communities to the project requirements justify an ongoing effort to consolidate the emergency committees, so as not to lose the ground gained in their organization and functioning.
- In view of the importance of the commercialization of inputs and products for farming activities, this aspect needs to be coordinated in future agricultural development projects.
- Bear in mind the recommendations made by the AID Monitors/Advisers that a new budget should be planned to obtain a higher investment which will make it possible to meet the goals and extend the coverage of the local committees.
- The regional offices should perform follow-up of the revolving loan fund beneficiaries, to evaluate their agricultural production and their behavior as beneficiaries, in order to systematize the loan fund operations.
- Since the potato seed obtained does not meet with the sanitary requirements, it should be sold for consumption, and the money obtained from the sale be used by the committees to purchase certified seed for the next agricultural cycle.

- The funding must arrive on time, because the agricultural schedule in the Peruvian highlands is inflexible.
- At several points of the Project operation, it became apparent that the human capacities needed to be improved, to raise the levels of technical assistance, training or project management.
- Project management criteria need to be coordinated among the three participating agencies to improve the evaluation mechanisms and systematize the joint experience.
- Include ideas contributed by the beneficiary population when defining and executing work plans, in order to integrate knowledge and make the technical proposals more viable.
- Design a training system to establish the mechanisms for a total dissemination of the concepts learned, to reach all the beneficiaries of a project.
- A regular program needs to be started as soon as possible to strengthen and consolidate the goals achieved by the Project. From the social point of view, it is recommended to reinforce the process of capitalization of inputs, intensify the cultural and technical training of the peasant men and women and consolidate the organization of the communities as agents actively promoting their own development.
- A socioeconomic diagnosis of the beneficiary communities should be made, to define the goals of the proposed program in the short term.
- The proposals presented have been explained independently, but they need to be integrated to improve the results of any project carried out similar to the one under evaluation in this report.