

ISN-54015 CLASSIFICATION
PROJECT EVALUATION SUMMARY (PES) - PART I

PD-AAP-087
 Report Symbol U-447

1. PROJECT TITLE Niamey Department Development II	2. PROJECT NUMBER 683-0240 / 15	3. MISSION/AID/W OFFICE USAID/Niger 137
	4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or RIG/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) 683-83-04	
<input checked="" type="checkbox"/> REGULAR EVALUATION <input type="checkbox"/> SPECIAL EVALUATION		

5. KEY PROJECT IMPLEMENTATION DATES			6. ESTIMATED PROJECT FUNDING	7. PERIOD COVERED BY EVALUATION	
A. First PRO-AG or Equivalent FY <u>81</u>	B. Final Obligation Expected FY <u>86</u>	C. Final Input Delivery FY <u>86</u>		A. Total \$ <u>19,392,000</u>	From (month/yr.) <u>June 1981</u>
			B. U.S. \$ <u>13,582,000</u>	Date of Evaluation Review	

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

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., algram, SPAR, PIO, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
Prepare revised implementation plan on the basis of recommendations both of the evaluation and of the February 1983 RIG/WCA audit.	USAID/GON	1 March 1984

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS			10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT		
<input type="checkbox"/> Project Paper	<input checked="" type="checkbox"/> Implementation Plan e.g., CPI Network	<input type="checkbox"/> Other (Specify)	A. <input type="checkbox"/> Continue Project Without Change		
<input checked="" type="checkbox"/> Financial Plan	<input type="checkbox"/> PIO/T	_____	B. <input type="checkbox"/> Change Project Design and/or		
<input checked="" type="checkbox"/> Logical Framework	<input type="checkbox"/> PIO/C	<input type="checkbox"/> Other (Specify)	<input checked="" type="checkbox"/> Change Implementation Plan		
<input type="checkbox"/> Project Agreement	<input type="checkbox"/> PIO/P	_____	C. <input type="checkbox"/> Discontinue Project		

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)		12. Mission/AID/W Office Director Approval	
Saley Moussa, Project Director		Signature _____	
James Lowenthal, Project Officer		Typed Name <u>Jesse L. Snyder</u>	
Clinton Doggett, Asst. Project Development Officer		Acting Mission Director	
		Date <u>2/10/84</u>	

PDAPP 087

PROJECT EVALUATION SUMMARY (PES) – PART II

The following topics are to be covered in a brief narrative statement (averaging about 200 words or half a page per item) and attached to the printed PES facesheet. Each topic should have an underlined heading. If a topic is not pertinent to a particular evaluation, list the topic and state: "Not pertinent at this time". The Summary (Item 13) should always be included, and should not exceed 200 words.

13. SUMMARY - Summarize the current project situation, mentioning progress in relation to design, prospects of achieving the purpose and goal, major problems encountered, etc.

14. EVALUATION METHODOLOGY - What was the reason for the evaluation, e.g., clarify project design, measure progress, verify program/project hypotheses, improve implementation, assess a pilot phase, prepare budget, etc? Where appropriate, refer to the Evaluation Plan in the Project Paper. Describe the methods used for this evaluation, including the study design, scope, cost, techniques of data collection, analysis and data sources. Identify agencies and key individuals (host, other donor, public, AID) participating and contributing.

15. EXTERNAL FACTORS - Identify and discuss major changes in project setting, including socio-economic conditions and host government priorities, which have an impact on the project. Examine continuing validity of assumptions.

16. INPUTS - Are there any problems with commodities, technical services, training or other inputs as to quality, quantity, timeliness, etc? Any changes needed in the type or amount of inputs to produce outputs?

17. OUTPUTS - Measure actual progress against projected output targets in current project design or implementation plan. Use tabular format if desired. Comment on significant management experiences. If outputs are not on target, discuss causes (e.g., problems with inputs, implementation assumptions). Are any changes needed in the outputs to achieve purpose?

18. PURPOSE - Quote approved project purpose. Cite progress toward each End of Project Status (EOPS) condition. When can achievement be expected? Is the set of EOPS conditions still considered a good description of what will exist when the purpose is achieved? Discuss the causes of any shortfalls in terms of the causal linkage between outputs and purpose or external factors.

19. GOAL/SUBGOAL - Quote approved goal, and subgoal, where relevant, to which the project contributes. Describe status by citing evidence available to date from specified indicators, and by mentioning the progress of other contributory projects. To what extent can progress toward goal/subgoal be attributed to purpose achievement, to other projects, to other causal factors? If progress is less than satisfactory, explore the reasons, e.g., purpose inadequate for hypothesized impact, new external factors affect purpose-subgoal/goal linkage.

20. BENEFICIARIES - Identify the direct and indirect beneficiaries of this project in terms of criteria in Sec. 102(d) of the FAA (e.g., a. increase small-farm, labor-intensive agricultural productivity; b. reduce infant mortality; c. control population growth; d. promote greater equality in income; e. reduce rates of unemployment and underemployment). Summarize data on the nature of benefits and the identity and number of those benefitting, even if some aspects were reported in preceding questions on output, purpose, or subgoal/goal. For AID/W projects, assess likelihood that results of projects will be used in LDC's.

21. UNPLANNED EFFECTS - Has the project had any unexpected results or impact, such as changes in social structure, environment, health, technical or economic situation? Are these effects advantageous or not? Do they require any change in project design or execution?

22. LESSONS LEARNED - What advice can you give a colleague about development strategy, e.g., how to tackle a similar development problem or to manage a similar project in another country? What can be suggested for follow-on in this country? Similarly, do you have any suggestions about evaluation methodology?

23. SPECIAL COMMENTS OR REMARKS - Include any significant policy or program management implications. Also list titles of attachments and number of pages.

Project Evaluation Summary (PES) - Part II

Niamey Department Development II (683-0240)

First Interim Evaluation

Introduction

The Niamey Department Development II Project (NDD II) is the second phase of a long-range program of integrated rural development in the Niamey Department of western Niger. The project's goal is to transfer agricultural techniques which will create the conditions necessary to increase farmers' capacity for greater food production and to support the establishment of local organizations through which a wide range of development services is available for villagers.

The project has implemented activities at eleven Farmer Couple Training Centers (CPTs), at each of which twenty farm couples acquire new agricultural techniques every year. The CPTs also serve as the basis for an extension and follow-up system. Emphasis is placed upon the extension of an improved agricultural package, including the introduction of animal traction equipment and chemical fertilizers, provision of medium-term credit, distribution of agricultural inputs to farmers, development of improved management skills for local organization leaders, and improvements in the role of women in the development process.

13. Summary

A. The Evaluation

The purpose of the evaluation, which was conducted in January 1983, was (1) to review the accomplishments and achievements of the project to date; (2) to determine the extent to which the project was attaining its planned outputs; and (3) to recommend modifications which would allow the project to reach its intended beneficiaries.

Major problems noted by the evaluation team included: (1) slowness in the development of a system of village level organizations; (2) an unacceptably low (28 percent) credit repayment rate and termination by the GON of short-term seasonal credit for the purchase of inputs, particularly fertilizer; (3) lack of progress in the creation of income-generating activities for women; (4) lack of progress in establishing the project Monitoring and Evaluation Unit; (5) problems of control and coordination; and (6) doubts concerning the viability of the technical package being extended by the project.

Positive observations included: (1) That a strategy had been

evolved for implementation of a program for development of village level organizations during 1983, one that will train and involve the technical services directly in gathering data on villages and cooperatives; (2) That intensive review of the credit system had been undertaken and safeguards instituted to ensure future smooth operating of the project credit fund; (3) That CPTs were being constructed and made operational according to plan, and were operating at maximum capacity; (4) That the addition of a Women's Participation Advisor in September 1981 was likely to result in significant progress in the development of specialized training programs for women during 1983; and (5) That the project had made significant progress in addressing problems associated with the institutionalization of teamwork in development activities. Further detail concerning progress made by the project since the evaluation may be found in Section 13.B. below.

The evaluation team felt that, overall, the NDD II Project was in line with recent GON decisions regarding decentralized development and that it offered "what Nigeriens and others point out is the only example of progress in solving the intra-organizational problems faced by all productivity projects in Niger, making many see it as a promising model for other projects." Major issues and recommendations revolved around the credit system, the technical package and the GON contribution and recurrent cost issue. A discussion of these and other output-related recommendations is contained in Sections 16 and 17 below.

General recommendations included: (1) That the End of Project Status be redefined in terms of indicators that will demonstrate as much as possible "the institutionalization of a process", which is the purpose of the project, rather than in terms of static achievements, which are more appropriate indicators of outputs; (2) That the GON and USAID clearly articulate what organizational units and functions will be in place when the project ends and what the relationship between these units and functions will be; and (3) That close linkages be established and maintained between the USAID Agricultural Production Support Project implementation units and the NDD Project.

B. Progress Made To Date in Meeting Recommendations

Since the evaluation, the project has (1) dramatically increased the credit repayment rate from less than 30 percent to almost 65 percent; (2) implemented revised systems of inventory and credit management; (3) increased the training given to the staff of the CPTs; (4) hired eleven female follow-up agents to complement the all-male staff; (5) almost tripled the amount of time devoted to training follow-up agents; (6) begun to evaluate systematically the use of the technical package in the different agro-ecological zones of the project; (7) continued to place emphasis on promoting participation by all levels of project staff; (8) initiated a model village-level farmer training program; (9) initiated a pilot farmer training program for the

translation of cooperative management documentation into local languages; (10) negotiated the payment by the villages themselves of CPT recurrent costs; (11) introduced the use of micro-computers as a management tool; (12) revised its local organization development strategy to focus more intensively on the issues of self-management; (13) greatly improved reporting at the central and arrondissement level; and (14) initiated a program of seed multiplication in the vicinity of each CPT, thus transforming what had been a fixed-cost investment into a multi-purpose facility. It is now evident that ex-trainees of the CPTs who have applied substantial portions of the technology package extended by the project have been able to double their yields.

Despite the progress which has been achieved over the past twelve months, certain activities will continue to require priority attention from USAID and the GON. The creation of self-managed local organizations in the presence of weak arrondissement-level cadres, in particular, will continue to be one of the most difficult tasks faced by the project. In addition to coping with this problem, the project must (1) make greater efforts to profile the selection of improved agricultural technical packages; (2) strengthen its follow-up extension program; (3) continue efforts to raise the farmer credit repayment rate above the 90 percent level; and (4) continue efforts to consolidate and extend the impact of the Women's Participation Unit.

14. Evaluation Methodology

The evaluation report represents the product of a team effort, although differences in team members' scopes of work and the staggered nature of their arrivals and departures made for a less than fully synthesized report. This was due to the fact that the project's credit component had already been undergoing a thorough analysis, and this important work (which was highly relevant to that of the evaluation team) overlapped both at the start and at the end of the "core" team's stay in Niger. This "core" team consisted of Development Administration Specialist Richard Roberts, Social Scientist Teresa Ware of SDPT Bamako, and Agricultural Economist Douglas Barnett of REDSO/WCA who worked on aspects of the technical package (specifically animal traction).

A short-term Agricultural Credit Advisor, Stanley Straughter, was in the process of finishing up his intensive review of the NDD II credit component as the evaluation commenced. Finally, a consultant Credit Management Specialist, Thomas Stickley, arrived toward the end of the evaluation to develop a new set of guidelines governing the management of the credit component. The work of the core team benefitted greatly from consultations with the latter two individuals. The requested GON participants in the evaluation were, unfortunately, named late, and their participation was minimal as a result.

The evaluation work consisted of intensive review of project documents and of interviews in Niamey, Lossa (during the

project's annual management and coordination conference] and Quallam Arondissement. The team was given free access to documentation and full cooperation by project staff. They were able to consult both internal and external memoranda and reports, but were hampered by the fact that much of the quantifiable data required for measuring project progress had not then yet been synthesized.

15. External Factors

The chief external factor affecting the project was the growing difficulty of the GON in meeting its financial obligations to the project. This problem is discussed in Section 16 below. The evaluation also noted that the GON's cutting off of seasonal (short-term) credit might have had a negative impact on the rate of acceptance and use of chemical fertilizer in the project zone.

16. Inputs

AID inputs at the time of the evaluation were essentially on schedule. Five long-term technical assistance positions were filled within six months following signing of the Grant Agreement. Project development in the area of monitoring and evaluation was set back by the decision to change advisors in June 1982 (leaving a period of several months with the position vacant) and by the need to start building a foundation in late 1982. The long-term Master Mechanic position remained to be filled.

The evaluation team found that there had been far less use of short-term technical assistance than that called for in the Project Paper and, in their view, less than there should have been. AID training inputs had also been a bit behind in the area of participant training. Commodity inputs were on schedule, although fertilizer sales had been moving more slowly than anticipated, resulting in a build-up of stocks.

The GON had not provided all of the personnel anticipated, particularly in the case of the CPTs. In addition to the directors and literacy instructors (which had been provided), the GON was to have provided two middle-level cadres for each CPT. These latter positions had not been filled by the GON, nor were there any indications they would be. The GON had, similarly, been unable to provide counterparts to the expatriate long-term project technical advisors.

The major issue on the subject of inputs was the GON contribution to the budget and to material subsidies. The GON had deposited only 85 million CFA out of the requested 181 million CFA for the project operating account for 1982, and did not deposit the CFAF 50,000,000 committed for 1983. A similar situation existed for the deposit of an amount equivalent to subsidies for inputs sold to farmers. In the face of severe reductions in

the National Investment Fund (FNI) due to the fall-off in uranium revenues, it appeared unlikely that the GON would be able to contribute the original commitment it made to the project. USAID could pay for the remainder of project operating costs because dollar costs were less than anticipated.

In light of these funding problems, the team recommended (a) that the required GON contribution be reduced; (b) that USAID pick up local costs to the extent possible, (c) that the requirement for GON payments into the fertilizer subsidy sub-account for the credit fund be reduced proportionately to the reductions in the amount of the fertilizer subsidy; and (d) that the second interim project evaluation scheduled for mid- to late-1984 determine what options to recommend if the current level of resources available to the project proved inadequate for LOP.

17. Outputs

The project was on schedule in terms of most output items contained in the project implementation plan. The main exceptions were (a) applied research, which began a year behind schedule, and (b) the participant training, with two of the four participants still not named. It was on schedule for the rest of the implementation plan items except, as noted above, for the GON financial contribution. On the other hand, the evaluation team felt that not all important items were listed on the implementation plan. In the case of one item--initiation of work with village-level organizations--the project was making serious beginnings over a year late. The team also noted that the Logical Framework defined as outputs seven separate systems "established and functioning" but did not provide criteria by which to measure whether the systems were indeed established and functioning.

The seven systems are: (a) a system of technical service delivery; (b) a system of self-managed village organizations; (c) a system of credit delivery; (d) a system of agricultural inputs delivery; (e) a system to increase women's access to development activities; (f) a system to monitor and evaluate project activities; and (g) a project coordinating and management system.

A. With respect to the System of Technical Service Delivery, the team noted that "There is no conclusive evidence to indicate that the current agricultural technology package represents the best package for certain zones," and that "it appears to be profitable in those zones only in years of normal rainfall." The team recommended that the project continue extending improved techniques, making it clear that animal traction was not a prerequisite to use of the other techniques in the package, and that benefits could be obtained from the other techniques without animal traction. The team further recommended that the project's Applied Research Unit and Monitoring and Evaluation Unit maintain closer relations with ICRISAT and with the Rural Economic Research Division of INRAN, Niger's national agricultural research

institution.

The team also recommended that this component of the project (1) improve quality control over the training it finances; (2) improve follow-up on trainees to monitor and enhance performances; (3) assume, in addition to training currently undertaken in planning and organization, responsibility for training in technical and interpersonal skills needed by NDD and Technical Service personnel; (4) give additional time for NDD Niamey staff, arrondissement coordinators and Technical Staff delegates to attend refresher ("recyclage") courses given to CPT graduates in order to build relationships between the two groups; (5) pursue the possibility of adding to its staff a terminating Peace Corps Volunteer with CPT and follow-up experience to provide full time field support to follow-up agents; (6) Bring the Peace Corps input up to target; and (7) increase its use of outside short term technical assistance.

B. With regard to the System of Self-Managed Village Level Organizations, the team noted that, as a result of several both external and project-specific causes, the project had accomplished little to date to develop self-managed cooperatives, the primary village level organizations (VLOs) being targetted by the project. It noted, however, that NDD had evolved the beginnings of a realistic strategy for assisting local organizations to attain self-management.

Specific recommendations included (1) That detailed planning, involving intensive discussion with cooperative leaders, be carried out before implementing the 1983 VLO strategy; (2) That the qualifications and experience of personnel chosen to implement the strategy be given careful consideration; (3) That a team of two to three experienced people be recruited to direct the program under NDD guidance; (4) That coordination between the program and an existing IBRD "micro-project" be improved; (5) That baseline surveys of target villages be made, and annual follow-up surveys designed and subsequently carried out, to monitor impact of VLO development; (6) That a sample survey, based upon the experience of the 1983 and 1984 VLO program, be carried out in 1985 to define in the zone such factors as desires and priority needs perceived by villagers, villager attitudes towards "organized" activity, and impediments to the development of VLOs; (7) That the project ensure that its training needs are continually assessed and that necessary and appropriate training is provided; (8) That a blacksmith trainer be recruited and training initiated; and (9) that the VLO target be reduced from 50-60 cooperatives to 12-24 cooperatives.

C. With regard to the System of Credit Delivery, the evaluation team recommended a further thorough review of the credit system and the bringing on board of a consultant to determine the effect the cutting off of GON seasonal (short-term) credit had had in the acceptance and spread of new techniques, particularly fertilizer, in the Project Zone. Should the study indicate that such lack has been a major deterrent to adoption of improved

techniques, the evaluation team recommended, AID should insist that the credit fund provide such seasonal inputs credit.

Other specific recommendations included (1) That the recommendations of the consultants on cooperative accounting and on credit management be adopted and implemented immediately; (2) That the need for training to implement changes in the credit system be assessed immediately; (3) That NDD report on, and AID review in mid-1983, (a) progress in collecting loan repayments due as of 31 December 1982, and progress in implementing other consultants' recommendations for the period through 31 March 1983 and (b) levels of loan disbursements and conformance of the procedures and practices used to the recommendations of the consultants; and (4) That AID auditors review the credit system operations of 1983 as early as technically feasible in 1984.

D. With regard to the System of Agricultural Inputs Delivery, the evaluation team noted that the flow of implements and fertilizer to the field had improved over that of Phase I and the start of Phase II. Supply on hand in the cooperatives exceeded demand except for oxen carts and donkey carts. Fertilizer stock at the cooperative level exceeded the previous year's sales, and orders were being cut back as a result. The team recommended that AID attempt to ensure that the APS project's Agricultural Inputs Consultant conduct an assessment of the agricultural inputs sector and include the NDD zone in his study with a view to identifying any persistent weaknesses and ways of eliminating them.

E. With regard to development of a System to Increase Women's Access to Development Activities, the team noted that women had accompanied their husbands to training sessions at the CPTs but that there had been insignificant progress in the development of training programs specifically for women. The team recommended (1) That the project draw up a plan of action for formalizing a collaboration with the Association des Femmes Nigériennes (AFN) and initiate introductory meetings for the purpose of explaining objectives of the women's component of the project; (2) That the Women's Participation Unit work with the Training Unit in making suggestions for designing training workshops for technical service field personnel in how to communicate skills and techniques in a "non-directive" manner; (3) That all short term resource needs for 1983 tasks be determined to facilitate their accomplishment; (4) That male as well as female technical support agents and personnel receive training in effective communications with all-female audiences; (5) That increased efforts be made to ensure the presence and participation of women in technical service presentations to villages; and (6) That the "Open Door" program be extended to include and accommodate women visitors not only from the villages of the trainees but those of neighboring villages as well .

F. With respect to the System to Monitor and Evaluate Project Activities, the evaluation team noted that both elements of this component, i.e. data gathering, synthesis and analysis on

the one hand and applied research on the other, commenced quite late in the project and perhaps actually should have been designed into Phase I and accorded relatively high priority. The key lesson to be learned from experience to date with this component was, in the eyes of the evaluation team, that a system to collect and analyze at least basic project/results indicators should be soundly established at the start of the project. If the technical package being extended in a rural development project has not been tested, analyzed and, if necessary, tailored to local conditions before the project is begun, then on-farm applied research and farming systems studies should be a priority part of the project itself from the very start.

With regard to the monitoring and evaluation element, the team recommended (1) That the project use the October 1982 consultant report on the monitoring and evaluation system as the basis for development of the system; (2) That monitoring and evaluation information needs be spelled out, and a survey agenda for the Unit over the balance of the project life prepared; (3) That the project make use of short term consultancies to put the Unit on a sound footing before the commencement of the 1983 agricultural season; (4) That the existing data base on the CPT graduates farming in 1982 be "cleaned up" to enable it to be used as base line data for future comparisons; (5) That the project obtain data on UNCC sales in the non-NDD zone of fertilizer and other input sales for 1981 and 1982 to permit computation of changes in the zone; and (6) That the project obtain a micro-computer capability for data processing needs of the Unit.

With regard to the applied research element, the team recommended (1) That INRAN assign one or more agronomic engineers to work full time with the unit to help it plan and implement on-farm research, and that INRAN assume responsibility for applied research in the project zone within the next two years; (2) That experiments both with and without animal traction (excluding two-oxen traction) be undertaken on the CPTs during 1983; (3) That more use be made by the applied research advisor of information gained from the experiences of CPT graduates using different mixes of techniques; and (4) That the Applied Research Unit, with the Monitoring and Evaluation Unit, maintain close relations with ICRISAT and with the Rural Economic Research Division of INRAN.

6. Finally, with respect to development of a Project Coordinating and Management System, the team noted that, while the GON had been unable to come up with adequate numbers of trained counterparts, the project management unit was reasonably well organized at the headquarters level. It suggested, however, that attention to internal communications and information flow was needed. It also made note of the fact that linkages between the Project Management Unit and the technical services in the field were not hierarchical, with the Project Director having much less "control" over the field personnel than that envisioned in the Project Paper. The team felt, however, that the project had made significant progress in institutionalizing a system of teamwork based on discussion, negotiation and persuasion rather than on a

hierarchical chain of command, a system that, while slow, was likely to produce more positive results than the hierarchical approach.

Specific recommendations included (1) That every effort be made to assign Nigerien counterparts to the expatriate advisors as soon as possible; (2) That the team-building, consensus development approach be continued and fully supported by AID and the GON; (3) That the project units that had not already done so prepare workplans for 1983 and initiate a system of regular submissions of detailed quarterly plans and reports relating activities to plans; and (4) That the 1983 and subsequent workplans for each unit describe the types of short term technical assistance needed at various points during the year.

18. Project Purpose

The purpose of the project is to institutionalize a process of rural development through the establishment of self-managed village organizations and participating individual farmers who, as a result, will be capable of achieving increased food production on a self-sustaining basis. It was evident, despite delays in project implementation and despite GON financial difficulties, that the project was moving toward accomplishment of this stated objective. Major questions, such as those concerning the appropriateness of the technology package and the viability of the credit system, were under active study and solutions were being devised. The development of a system of village-level organizations had proceeded slowly and was behind schedule but, although the target must now be reduced in terms of the absolute number of such organizations to be put in place, it was evident that the process of establishing them had been put into place.

19. Project Goal

The stated project goal is to assist Niger in achieving self-sufficiency in food production and improve standards of living. Given the lack of quantitative data available at the time of the evaluation, however, the team was unable to make a meaningful judgement as to progress toward achievement of this goal.

20. Beneficiaries

The direct beneficiaries of the project are the farmer couples that obtain training at the CPTs. In 1982 four new CPTs became operational (three were completed under Phase I of the project). Each CPT is operating at maximum capacity, graduating 20 couples per year. A total of 60 couples was graduated in 1981, 140 graduated in 1982, and 200 will graduate in 1983. The cumulative total of CPT graduate couples (including the 90 graduated under Phase I) is thus 290. Other direct beneficiaries

include villagers contacted by the technical services; cooperative leaders; and farmers receiving credit.

The rationale for training couples at the CPTs is that they will return to their villages and demonstrate to their fellow villagers the techniques they have learned. Thus, the total number of potential beneficiaries is much larger than the number of direct beneficiaries. During Phase I it is evident that the selection criteria used to select the trainees from the villages were inadequate. Village leaders were apparently reluctant to release their more productive members and, lacking confidence in and/or understanding of the CPT program, often selected less than ideal candidates to send to the CPTs. The impact on adoption of improved farming techniques following their return to the village was, understandably, marginal.

The selection criteria for trainees were upgraded, however, and villager understanding of the purpose and potential benefit of sending their more progressive and productive farmers to the CPTs had improved significantly during Phase II. The evaluation team found that, with the improved selection criteria, there had been a significant spread effect by CPT graduates of the technology package to non-CPT graduates in certain villages. In addition, the "Open Door" program, in which non-CPT farmers are invited to spend a day and a night at the CPT to hear the trainees explain and demonstrate the new technologies, had favorably impressed villagers.

Problem areas which remained included (a) variable quality in the training offered by the GON technical services responsible for the actual training at the CPTs in each specific field; (b) poor follow-up and monitoring of graduates once they return to their villages; and (c) insufficient integration of CPT graduates into the national cooperative structure, largely a result of inadequacies in the cooperative system itself.

21. Unplanned Effects

The evaluation found that the project had had no unexpected results or impact.

22. Lessons Learned

The following may be taken as lessons learned from the evaluation:

First, doubts about the viability of a technical package must be addressed thoroughly before embarking upon the extension of such technology. If there are uncertainties, the project must at a minimum couple extension of the technology with a rigorous and effective program of applied research.

Second, underestimation of the host country's human and financial resources can result in major implementation problems. While the project design may be excused for not predicting the fall-off in uranium revenues (and consequent shrinking of the National Investment Fund), a better and more realistic assessment of the Nigerien human resource pool available for the project could have been performed. The problems experienced with the credit component in particular may be attributed in large part to faulty institutional and manpower analyses.

Third, there is some indication that the project was structured in an over-centralized fashion, resulting in implementation inefficiencies. With the current GON emphasis on decentralized development, however, it could be argued that the village-level organizations will now begin to lessen their dependence on centralized services.

Finally, there is some question concerning the cost effectiveness of concentrating training in the CPTs. It has been argued by some that the dollar-per-beneficiary ratio is somewhat high. The project has, however, since devised a strategy for extending CPT-type training to the villages themselves, thus increasing the number of potential direct beneficiaries.

23. Special Comments or Remarks

The evaluation took place at a time when the project had experienced only one full year of implementation. Many corrective measures instituted by the project to address problems mentioned by the evaluation had not, as a result, had time to show their effects. The positive effects of these corrective measures were in fact evident by the end of 1983.

Information Appendix for Executive Level Personnel

1. What constraints does this project attempt to overcome and who does it constrain? Does the project attack labor, policy or other constraints?

The project attempts to overcome two constraints: (a) a land constraint that prevents significant increases in food production by extending cultivation to new lands, and (b) organizational constraints that leave villagers highly dependent on central government for any improvements in their living standards.

2. What technology does the project promote to relieve these constraints?

The project introduces techniques for land preparation, seeding and weeding, and the use of chemical fertilizer and animal traction to improve traditional practices. The project also has an applied research component designed to adapt the technical package to the various agro-ecological zones of the project area.

The project trains farm couples in residential centers (Farmer Couple Training Centers) as a way of (a) introducing the new practices to their villages, (b) improving the selection of the trainees through village cooperatives into the technology spreading activity, and (c) developing the cooperatives as centers of economic activity in the villages.

3. What technology does the project attempt to replace?

The project attempts to improve upon traditional cultural and land conservation techniques widely used in the project zone. The techniques include the use of animal traction, improved seed varieties, chemical fertilizer, pest management and improved land preparation methods.

4. Why do the project planners believe that the intended beneficiaries will adopt the proposed technology?

The project planners believe that increased yields will generate revenues adequate to cover the costs of the techniques, at least in years of adequate rainfall (i.e. non-drought years), and that farmers using animal traction will earn significant off-season income using their animals and carts for haulage. The incentive for increasing crop yields through use of the package in the northern portion of the project zone (where there is less rain than

in the south) appears to be marginal at present, but applied research presently underway is expected to produce a package better adapted to that area.

It is anticipated that the villagers will see that they can increase their standard of living faster and more reliably if they take organized initiative and collective interest in their own welfare. Indicators of increased initiative are (a) increased villager interest in the farmer couple training and (b) isolated cases of cooperatives opening small general stores in villages previously lacking such conveniences.

5. What characteristics do the intended beneficiaries exhibit that have relevance to their adopting the proposed technology?

Few have functional literacy, but the elements of the technical package are known in general terms in the region and practiced to some extent by the farmers. There is little experience of local organized activity in the villages of the region, but it has been only in recent times that such organization has been encouraged

6. What adoption rate has this project or previous projects achieved in transferring the proposed technology? Why have or have not the intended beneficiaries adopted this technology?

In 1982, 72 percent of the farmers trained under Phase I of the project were using one or more of the twelve practices in the technology package, and 41 percent were using six or more of the practices. Shortcomings in the method used for selecting these trainees resulted in selection of many candidates with little interest in farming, and with very little potential for becoming good farmers or role models for others. In addition, problems of local availability and (even moreso, it is suspected) the lack of government-supported short term credit for seasonal inputs appear to have slowed adoption rates for phosphate and urea fertilizers (two of the twelve practices).

Cooperatives as commercial ventures have been established in the cash crop areas of the country but are of recent introduction in the project zone. They exist, at least in principle, in all villages of the zone but few are as yet very active. They have had little time to become active (most are one to three years old), and the responsible GON organization has tried to help all of the cooperatives simultaneously with a small, ill-trained, relatively immobile field force, rather than focusing limited resources on a few cooperatives at a time.

7. Will the project set in motion forces that will induce further exploration of the constraints and improvements to the technological package proposed to overcome them?

Yes. Applied agronomic research, including farming systems studies, are underway or planned, and the official GON research establishment--already regularly informed on project research--is to become a full time partner in that research. National policy is already focused on the prospects for developing dynamic village level organizations, and concentrated efforts are being made in the project zone as well as in other parts of the country.

8. Do private input suppliers have incentives to examine the constraints addressed by the project and come up with solutions?

They do not at present, but other USAID projects such as the Agricultural Production Support Project and the Agricultural Sector Development Grant will address this aspect on a national scale through central policy interventions.

9. What delivery system does the project employ to transfer the new technology to intended beneficiaries?

The project runs a thinly-staffed central management unit with multisectoral responsibility and manages ten farmer couple training centers for which it provides core staff. It operates primarily through the province and sub-province agents of the established technical services (ministries), over which it has no direct authority but which it is drawing into a collaborative "project team" relationship through regular participative review and planning seminars that involve all parties in the evaluation and planning process. (This, in itself, may be considered another form of "technology transfer", and one that has attracted considerable interest locally.)

The delivery system for the technology package is the farmer couple training centers, in each of which 20 farm couples per year, chosen by their villages and cooperative leaders to learn and bring the technology to the village, are taught the new practices. In the case of village level organization development, the farmer couple training centers are used as a point around which to focus village action. The principal approach, however, will be via multi-service teams undertaking intensive consultations with villagers to identify projects of interest to them and ways in which both villagers and the technical services can contribute to them. The technical services will then actually implement the projects with the villagers.

10. What training techniques does the project use to develop the delivery system?

The training in the centers is primarily through demonstration by the staff, followed by trainee application. Center fields are farmed by the trainees using the new techniques. Training for project and technical service personnel in planning and management is done through highly interactive seminars in which the participants are exposed to ways in which a technique may be applied to their own job situations (e.g. planning their role in project activities). Training of the teams to develop village level organizations had not yet begun at the time of the evaluation.