

Lessons Learned
From The
Niamey Department Development
Project

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TABLE OF CONTENTS

I.	Introduction	1
II.	Project Description	2
	A. Project Purpose	2
	B. Project Activities	2
	C. Project Costs	7
III.	Assessment of Project Impact	8
	A. The Overall Project Objective	8
	B. Project Achievements	10
IV.	Lessons Learned	12
	A. The Technical Package	12
	B. The Development of Local Organizations	14
	C. The Design and Management of Rural Development Projects	15
	D. Implementation through Existing Government Services	21
	E. Institutional and Financial Sustainability ..	21

Bibliography

INTRODUCTION

The Niamey Department Development Project (NDD) is a ten year integrated rural development project that is coming to an end in December 1988. The project began with a three year first phase to determine which interventions were likely to be most effective in the rural areas of Niamey Department. This was to have been followed by a five year second phase and, if warranted a third phase. Toward the end of the second phase it was decided to extend the project by two years rather than proceed with the third phase. The total cost of the project is about \$15 million in AID contributions and about \$2 million in Government of Niger (GON) contributions (not including salary support for GON cadres).

The purpose of this report is to review the ten year experience of the project to draw lessons learned that could be applied to similar projects in Niger and to rural development projects in general. The report is divided into three parts:

- o A description of project objectives and activities
- o An assessment of the achievement of project objectives
- o A discussion of the major lessons learned

Chapter One

PROJECT DESCRIPTION

PROJECT PURPOSE

The purpose of this project was to insitutionalize a self-sustaining rural development process based on increased agricultural productivity and strengthened local institutions. By the end of the project, it was intended that:

1. Local institutions would be able to initiate and implement development activities leading to sustained improvements in living conditions in the rural areas of Niamey department.
2. Government agencies would provide the supporting services needed for locally-initiated development activities.
3. Small farmers would have benefitted from productivity increasing innovations in farming practices, and an effective and sustainable agicultural extension system would be in place.

In order to assure that successful project activites would continue after the end of the project, project activities were to have been implemented through existing government services. This involvement would result in strenthened technical services familiar with and committed to project objectives and strategies.

Although it was originally projected that there would be significant increases in agricultural production by the end of the project, the main purpose was to initiate a rural development process. As such NDD was primarily an institution building project, not a production project. Therefore, the key measure of success was the existence of effective government services and local institutions that could initiate and implement development activities in rural areas.

PROJECT ACTIVITIES

The project activities to achieve the above purpose are described briefly below.

1. Agricultural Extension

Agricultural extension was carried out through farmer training centers (Centres de Perfectionnement Technique - CPTs). These CPTs, based on similar centers in other regions (Departements) of Niger, trained farm couples over an entire agricultural season. The training was based primarily on a package of improved practices for rainy season agriculture, but there was also training in literacy, livestock production, and dry season agriculture. The latter two were of particular

interest to the women trainees. The CPTs depended to a large extent of the support of existing government services (Services Techniques) at the sub-region (Arrondissement) level, primarily the agriculture, literacy and livestock services.

One of the major innovations taught at the centers was animal traction, and at the end of the training period each couple received on credit two oxen and a set of animal traction equipment to use on their own farms. This was a major incentive for attending the CPT.

By 1983 there were 10 CPTs in four of the six Arrondissements of Niamey Department. By then, the oldest of the CPTs had been operating for five years and serious flaws were becoming apparent. The most important were: high costs, poor selection of trainees, inappropriate training at the center, and almost no extension support after the trainees had returned to their villages. The end result was that very little of what was taught at the center was applied by the ex-trainee on his own fields.

In 1984, the project developed a new approach involving village training centers (Centres Villageois de Formation - CVFs). The content of the training was similar, but was extended over a two year period, and was conducted in the village where the trainees lived. The main advantages of the CVFs over the CPTs were that 1) they were less expensive, 2) the quality of trainees was higher and there were more of them from the same village, and 3) the growing conditions were similar to the farms of the trainees. The approach involved keeping three CPTs to train farmers who would become CVF chiefs. By 1986, seven CPTs were closed and 19 CVFs had started. The CVFs were a considerable improvement but retained two of the major shortcomings of the CPTs: many of the technical innovations being taught were agronomically or economically inappropriate, and there was an almost total lack of support from the Niamey Department Agriculture Service. The last three CPTs were closed in 1987 when it became apparent that the CVFs would not be continued after 1988.

By the end of the project 830 farm couples had been trained at CPTs and 325 farm couples had been trained at the CVFs.

2. Applied Agronomic Research

This activity was intended to be directly supportive of the agricultural extension program in the project area. AID funded an expatriate agronomist to advise the project on the testing of technical innovations to improve the technical package being extended to trainees in the CPTs. Initially, the trials were designed jointly by the project and INRAN, the Nigerien agricultural research institute. Most of the trials dealt with improved varieties and different fertilizer dosages. Some of the crops tested were of marginal interest to the project, especially in the early years when the project should have been focussing on millet and cowpeas. All of the research was conducted at the

CPTs using protocols prepared and approved by INRAN. This approach was followed until 1984. In retrospect much of the research was not directly applicable to growing conditions and farming systems in the project area and therefore had no impact on the CPT-based extension program.

Beginning in 1983 it became clear that the research program needed to be much more closely related to the needs of farmers in the project area. An economic study of the recommended technical package, carried out by Ithaca International in 1983, showed that key elements of the package (animal traction and fertilizers) were unprofitable for most of the farmers in the project area.

This was followed by an agro-ecological study in 1985. The study identified six major agricultural zones in the project area, each with different soil and climatic conditions, and each requiring essentially different technical packages. The technical package being extended by the project was applicable in only two of the six zones. Just as important, the study found that in most of the project area technical innovations should be aimed at stability of production rather than maximum yields. This was in direct contrast to the yield-maximizing technical package being extended in the CPTs and CVFs. The study recommended that the project conduct farm-level research in each agricultural zone aimed at identifying improved agricultural practices adapted to the actual growing conditions of the project area. These improved practices would then be extended to farmers through the CPTs and CVFs.

Four test villages were set up in 1986 and two in 1987. By using the growing conditions of each zone as the basis for designing the research, the trials had much more relevance to the needs of the farmers. Thus, instead of monocropped variety and fertilizer trials designed to answer INRAN questions, the research included animal traction experiments, soil and water conservation measures, mixed cropping, and measures to counteract the effects of increasingly short fallow periods.

At the end of the project, the research program was beginning to identify technical innovations that directly addressed the production constraints in the project area and could be incorporated relatively easily into existing farming systems. Unfortunately, the impact of this research on the extension program was minimal because 1) there was not enough time to set up effective linkages between the research work and the extension program and 2) given the wide variations in rainfall, three years was not enough time to reach conclusive findings.

3. The Strengthening of Local Organizations

This component addressed the central objective of the project. Local organizations were to be strengthened to carry out a wide range of activities that could contribute to growth and development in rural areas. This was considered the key to achieving a "self-sustaining rural development process". At the

beginning of the project the emphasis was on strengthening cooperatives so that they could distribute agricultural inputs and manage agricultural credit. To the extent that the government institutions responsible for agricultural credit and input distribution at the Department level needed to be strengthened, the project provided training and technical assistance. This initial emphasis assumed that rural development would be based on increased agricultural production which would require animal traction equipment and modern inputs, especially fertilizers. The project also intended to strengthen the capacity of local organizations to carry out other development activities including animal fattening, gardening, flour mills, and cooperative stores.

This component involved mostly training. Village groups were trained in skills necessary to initiate and manage development projects, including functional literacy. The project also trained the staff of key government services who were to be involved in this training, especially the UNCC, the Literacy Service, and the Animation (community development) Service. Associated with this effort was the development of national language training materials. The UNCC formed 127 cooperatives covering over 800 villages during the life of the project and the project provided training credit and other support to about 80 of them.

In 1984, the GON initiated a major shift in rural development policy away from large production projects with high recurrent costs to small, sustainable, locally-initiated projects (micro-realizations). This coincided with the increasing realization within the project that animal traction and modern agricultural inputs were not key elements in the improved technical package for most of the project area, and were not being demanded by farmers. This left the cooperatives with nothing to do and, in fact, the very large majority of cooperatives formed by the project remained totally inactive.

As a result, the project abandoned the attempt to strengthen all cooperatives to support the technical package and began focussing on local organizations which were interested in specific village-level activities and were prepared to commit their own resources. Thus in the final three years of the project, efforts were concentrated on about 40 village groups who received loans for micro-projects (average size loan: 1.5 million CFAF) and about 15 cooperatives which received assistance mostly for building low-cost warehouses and managing small revolving fertilizer funds.

4. Women in Development

From the beginning, it was a basic assumption of the project that women would not benefit much from project activities unless there was a separate component responsible for women's interests. AID funded an expatriate Women in Development advisor until 1985. Most of the interventions of benefit to women occurred in the CPTs, consisting of training in agricultural practices, literacy,

nutrition, and ways of organizing to carry out group activities. Project surveys found that these activities had little impact, primarily because they were not well implemented. The government services gave low priority to women's programs, and organizations that were specifically responsible for women's programs (mainly the Service d'Animation) were very poorly staffed.

In 1986, the project dropped this component and incorporated its activities into the agricultural extension and local organization development components. It is worth noting that the majority of the micro-projects financed during the last three years of the project were for women's groups.

5. Research in Animal Traction Equipment

This activity was not part of the original project design. During the early 1980's, when it was assumed that the animal traction package was viable, AID had tentatively agreed to finance a project to produce animal traction equipment in the private sector to meet the needs of farmers in Niamey Department. This was to have been a private sector development rather than a rural development project. However, during the final design phase, it was found that the animal traction equipment that was available at that time did not meet farmers needs and would therefore not be purchased. The design team recommended that new prototypes be developed that better met the needs of farmers.

AID and the GON accepted this recommendation and decided to add animal traction equipment research to NDD. The decision was made in 1984, the workshop was constructed in 1985, and the production of prototypes began in 1986. An expatriate technical advisor has been on board since early 1985. The main focus of the workshop has been on developing animal traction equipment for one animal instead of two. The workshop has developed improved donkey equipment and, more important in terms of farmer preference, agricultural equipment designed for one ox. This equipment is less expensive, easier to use, and better suited to the soils of the area. The workshop is also exploring non-agricultural uses of animal traction, especially for drawing water.

Although not originally conceived as part of NDD, this activity has made a major contribution to the achievement of project objectives. The one ox equipment is clearly more appropriate to the project area than the two ox equipment previously extended by the project. The workshop has trained farmers in the use of animal traction and rural artisans in repairing the equipment. The workshop has also worked with the applied research component to design and carry out soil preparation and cultivation trials comparing animal traction with manual methods.

6. Monitoring and Evaluation

At the beginning of the project the main objective of this activity was impact measurement. The main focus was on

determining the extent to which CPT graduates adopted what they learned at the CPTs and what impact this had on yields. These efforts were largely unsuccessful because of methodology and execution problems.

Beginning in 1984, the emphasis began to shift from evaluation to monitoring. This component took the lead on preparing workplans relating activities to objectives, and monitoring execution. This helped considerably in measuring progress, identifying basic design problems, and generally improving project management. Monitoring proved to be more feasible than impact measurement and, given the lack of project impact at the farm level, more useful as well. AID funded a technical advisor for this activity until mid-1985. After that time, technical advice was provided by the Chief of Party of the technical assistance team.

Project Cost

The AID contribution to the project was as follows:

Table 1

AID Contribution
(\$ millions)

<u>Category</u>	<u>Phase I</u>	<u>Phase II</u>	<u>Total</u>
Tech. Assist.		5.5	
Local staff		-	
Training		.7	
Commodities		3.7	
Construction		1.6	
Local expenses		3.2	
Other		.1	
<hr/>			
Total		14.9	

The commodities consisted mostly of fertilizers and vehicles; construction was mostly office buildings and to a lesser extent warehouses. Local expenses were for the salaries of project employees (excluding civil servants), vehicle operation and maintenance, and support for project funded activities.

Chapter Two

ASSESSMENT OF PROJECT IMPACT

THE OVERALL PROJECT OBJECTIVE

The overall objective of the project was to institutionalize a self-sustaining rural development process in Niamey Department. The achievement of this objective would have required three major, and in retrospect, extremely difficult accomplishments.

1. Improved agricultural technologies would have been accepted by farmers, and an effective and affordable agricultural extension system would have been established.

Virtually all of the households in the project area are small agricultural producers. Their standards of living will not increase significantly until agricultural productivity increases and production systems become better adapted to the low and variable rainfall conditions of the area. The project was to have developed and extended a set of improved agricultural practices suited to the project area in a cost-effective and sustainable manner. What happened in fact was that the project extended a fixed technical package developed by INRAN. This technical package was designed to maximize yields and until recently was recommended for all agricultural regions of Niger.

As noted above, this technical package was inappropriate for most of the project area and was largely rejected by farmers. Informed observers pointed out that new technologies cannot benefit farmers unless they are based on a sound understanding of local growing conditions and address critical production constraints. This required detailed analyses of production constraints at the village level as well as effective dialogue with farmers, an extension approach commonly referred to as Farming Systems Research/Extension (FSR/E). This approach was not adopted by the project with the result that, even at the end of the project, most of the CVFs were teaching technical innovations that did not meet the farmers needs.

The project also failed to leave behind an affordable and effective extension system. Until 1984, agricultural extension was conducted through CPTs, a system that proved to be too expensive and not workable in the Niamey Department context. The CVFs were an improvement both in terms of reduced costs and increased effectiveness. However, by not following the FSR/E approach they had little success in transferring new technologies to farmers. By the end of the project, they had not demonstrated that they were cost-effective and therefore are unlikely to be continued.

2. Village-level institutions 1) would know how to initiate and manage local development activities; 2) would be motivated to initiate such activities using their own resources; and 3) would have successfully initiated such projects in sufficient numbers to have started a process that would continue after the end of the project.

This was the central objective of the project dating back to the initial design of phase I. Cooperatives were formed throughout the project area. Village authorities were made aware of development possibilities and received training the preparation and implementation of village-level projects. The underlying assumption was that unless the local population decided which development activities to undertake and committed their own resources to these activities, rural development could never be self-sustaining. In the end the project failed to achieve this objective because 1) the human resource development needs at the village level were too great; 2) there were too few viable village-level development activities of immediate interest to villagers, and 3) in most villages, the resources available for development activities were negligible. An added factor was that for years most village-level projects had been fully funded and implemented by higher authorities. Villagers simply found it difficult to think of government-supported development activities as primarily their responsibility. In the end, fewer than 50 villages (out of over 800 in the project area), successfully implemented local development projects, and most of them still do not have the knowledge and motivation to initiate and implement additional activities on their own.

3. Government services would be able and willing to support village-level rural development.

When this project was designed most of the government services at the department and Arrondissement levels were extremely weak and provided no meaningful support for rural development activities. The services that needed strengthening were agricultural extension and applied research, livestock extension, the agricultural credit bank, the agricultural input distribution system, the regional cooperative council, the literacy service and the community development service. This was to have been achieved by fully integrating them in the planning and implementation of project activities and providing technical assistance and training as necessary. Despite repeated project efforts, the government services chose not to participate in most project activities. As a result, the expected strengthening of these services did not occur.

The government services also needed to be reoriented away from top-down programs to programs based on local participation. This meant that services would be based on the felt needs of the rural population instead of on

desisions made at the national level. It also meant that individual government services would work with each other as teams to address problems at the Department and Arrondissement levels. This was a major focus of project efforts during the early years. The CPTs were designed as focal points for government services to work together in adreessing the needs of rural households. Seminars in communication skills and common problem solving were sponsored by the project for civil servants working in Niamey Department. These seemed to be well received by the individuals attending but when they returned to their respective services the traditional top-down decision making channels were too strong. In the end, the project had almost no impact on strengthening or re-orienting the government seVICES at the Department and Arrondissement levels. Thus they are no further along in terms of being able to effectively support a "self-sustaining rural development process" than they were at the beginning of the project.

PROJECT ACHIEVEMENTS

Although the project can be said to have had little impact in terms of its overall objective, it was beginning to move effectively in the right direction by the end of the project. The main accomplishments were the following:

1. The role of the CPTs became to train trainers for the CVFs which became the primary vehicle for agricultural extension at the village level. This has resulted in less expensive and more effective agricultural extension. The CVFs have not yet adopted the FSR/E approach but, because they are designed to be based in one village over two or more years, they have the potential to apply the FSR/E approach (i.e., a good understanding of production constraints and feedback from farmers) more effectively than other extension methodologies currently being used in Niger.
2. As a result of the agro-ecological study, project thinking has begun to move away from the fixed technical package to a recognition that there are widely varying growing conditions in Niamey Department that require different technical innovations. Some project personnel are also beginning to understand that the main concern and need of farmers in the project area is not yield maximization, but stability of production. This is the necessary first step in a true reorientation of the extension program in Niamey Department.
3. The animal traction prototype equipment workshop represents a major breakthrough for Niamey Department. Not only has it demonstated equipment clearly superior to the expensive two ox equipment, it is exploring new ways of utilizing animal power to improve the lives of the rural population. In addition , the workshop demonstrates to Nigerien technicians and decision makers that equipment can be tailored to the

needs of the user rather than the user having to adapt his needs to what is available.

4. Efforts to strengthen local institutions have now become more realistic and effective. Training methods and materials are improved, and local organization development activities are related to specific activities that are viable and desired by the beneficiaries. It has also been recognized that establishing highly motivated and effective local institutions throughout Niamey Department is a long-term goal and, in any event, is not a panacea for all rural development problems.

None of the above achievements have yet had a significant impact on the rural population, and if they are not continued we can be sure that this project will have had almost no long term development impact. Perhaps the project's most disappointing failure is that the CVFs were not brought to the point where they were effectively extending technical innovations based on farming systems research. This would have been the critical final step in the process that started with the agro-ecological study. Bringing them to that point would require two to three years of sustained effort, including a strong agricultural extension advisor. Even if it had the interest, there is no way that the Agriculture Service could carry this out on their own, and at present it appears that the donor community has no interest in providing the necessary support.

As far as other recently successful activities are concerned:

- o The cooperative training will probably continue at a much reduced level under another AID project (CLUSA).
- o It is almost certain that the prototype workshop will continue at its present level for at least two more years, but there is no local institution with a clear mandate for continuing this type of work over the long run.
- o There is some interest in continuing the FIL but it appears that no existing institution has the capacity to implement it properly. There is a strong likelihood that it will gradually disappear after the end of the project.

Thus, 10 years after the start of this \$15 million project it appears that there will be very little to show for it. Could some things have been done differently to increase the impact of the project, or could the project have been designed and implemented differently so that the costs would have been more in line with the benefits? The next section discusses lessons learned that may be applicable to future rural development projects under conditions similar to those in Niamey Department.

Chapter Three

LESSONS LEARNED

LESSON ONE:

An effective small farmer extension program must be based on a sound understanding of local growing conditions and existing farming systems.

The NDD project, through the CPTs, extended a comprehensive package of technical innovations designed by INRAN to maximize yields throughout Niger. This package was recommended for the entire project area, although rainfall varied from less than 300 mm in the north to 800 mm in the south. Soil conditions also varied considerably. The technical package included:

- o two-ox animal traction for soil preparation and weeding
- o the use of fertilizers (phosphates and urea)
- o monocropping instead of mixed cropping
- o increased plant densities
- o the use of improved seeds
- o the use of fungicides

What the project failed to consider is that existing production systems in the project area were more or less in equilibrium, albeit at a very low level of productivity. Over time these farmers had optimized the use of their resources to assure adequate food production under conditions of widely varying rainfall. From the farmer's standpoint technical innovations disrupt this equilibrium and involve trade-offs. Animal traction and fertilizers undoubtedly increase production when rains are adequate but also involve increased risks. Monocropping also has advantages, (increases the potential impact of modern inputs and facilitates animal traction) but also involves increased chance of loss should the rains not be suited to that crop. Other recommended practices, such as more frequent weeding, involve a reallocation of labor time out of other activities or leisure time. A farmer will always consider these trade-offs and accept technical innovations only when he feels that the advantages outweigh the disadvantages.

The CPT system simply assumed that the recommended package was an obvious improvement over traditional systems and should be accepted in its entirety by all farmers. However, the project design recognized that certain elements of the package may in fact not be appropriate and provided for impact evaluations to determine which elements were not being accepted and why. This information was to have fed back into the extension program so that adjustments could be made to reflect actual conditions in the project area. This effort was not successful because 1) the

impact assessments were not well done and 2) the extension staff was not convinced that changes in the technical package were really necessary.

By 1983, it became abundantly clear that the technical package was not being accepted by the farmers. Project experience and outside studies found that: 1) the animal traction equipment was not suited to the soil and climatic conditions of the area, 2) in most of the area fertilizer use was uneconomic because rainfall was inadequate to assure the necessary yield response, 3) mixed cropping had clear advantages over mono-cropping, and 4) the farmers faced production constraints, such as soil erosion and the lack of organic matter in the soil, that were not even recognized by the technical package.

Eventually the project began to take some corrective actions. The agro-ecological study was carried out in 1985 and, beginning in 1986, on-farm trials were carried out in the six agricultural zones identified by the study. These trials identified and addressed actual production constraints as experienced by farmers in each of the six areas. Also, in 1986, the animal traction prototype workshop began producing equipment that was suited to the project area and of benefit to the farmers. These positive developments, however, came too late to have an impact on the extension program. Until the very end, most of the CPTs and CVFs continued to extend the fixed technical package, including two-ox traction, mono-cropping and the use of fertilizers.

A Farming Systems Research/Extension approach would have yielded somewhat different results. Using this approach, the first step, before the opening of any CPT, would have been the agro-ecological study and a study of existing farming systems in the area. This would have identified critical production constraints as well as farmers' felt needs, and served as the basis for designing the extension program.

The studies would have been followed by the training of the extension staff in farming systems-based extension. Experience elsewhere has shown that short-term training is usually not sufficient. Most extension agents are trained in top down approaches. Only through continued on-the-job training is the farming systems approach likely to become integral to the extension program.

Given the lack of farming systems expertise in Niger and the strong resistance to abandoning the INRAN technical package, the technical assistance team should have included an agricultural extension advisor familiar with the FSR/E approach.

It must be emphasized that this approach would not have guaranteed spectacular results. In fact, it now appears that the possibilities for significantly increasing production in the project area are fairly limited. All that can be expected in the medium term is that production can become more stable and soil degradation leading to steady declines in yields can be gradually

reversed. These objectives would have to be pursued recognizing that the area will always be marginal from an agricultural standpoint. Production will be mostly for home consumption, and rural incomes above the subsistence level will have to come from activities other than agriculture.

LESSON TWO

There is no point in creating self-managed local organizations capable of initiating and implementing development activities unless there are viable development activities to undertake. Where there are very few such activities, a self-sustaining rural development process as exemplified by the existence of self-managed local organizations is not possible and therefore should not be attempted.

The key measure of success in achieving a self-sustaining rural development process was to have been the existence of self-managed local organizations throughout the project area. These organizations would initiate development activities, participate in their implementation and commit local resources. The implication was that rural villages would no longer be passive participants in rural development projects, and therefore would be motivated and capable of continuing the development process after the end of the project. The importance of local organization development was increased in 1984 when the GON reaffirmed that rural development was primarily the responsibility of the rural population (the Societe de Developpement) and the role of government services was limited to providing technical support for local initiatives.

At the beginning of the project, it was not known exactly what development activities local organizations would want to undertake but, at a minimum there would be a need for organizations to manage input distribution and agricultural credit related to the improved technical package. Farmers would need animal traction equipment, fertilizers and fungicides. Therefore, during the early years, the project concentrated on forming cooperatives, building warehouses, and training cooperative officials in bookkeeping, warehouse management, and credit management. Attempts were made to encourage other activities such as grain mills, cooperative stores, and school gardens, but these did not succeed because of a lack of interest.

The development of local organizations accounted for a major portion of project resources. At least fifteen person-years of technical assistance in input distribution, credit management, and local organization development was provided during the life of the project. In addition, about 50 warehouses were constructed, and vehicles and other support was provided to staff responsible for training and logistic support. In the end, farmers in the project area did not adopt the technical package, and the development of cooperatives to manage agricultural credit and input distribution turned out to be largely a wasted effort.

Relatively late in the project, the decision was made to concentrate project resources on local organizations which had specific activities they wanted to undertake. The leaders of these organizations were trained in how to decide whether a project was viable, how to mobilize local support and resources, how to obtain government assistance, and how to manage the activity once it was underway. By being directly related to specific activities, the training became more effective and succeeded in creating "self-managed local organizations".

The key point, however, is that not many villages were truly interested in initiating local development activities, and the activities that were started were very small. In total they do not begin to approach the critical mass needed to assure a self-sustaining rural development process. This leads to a basic lesson in regional development: there cannot be a major change in the level of development of a region until there is an outside impetus for such change. This can be the introduction of a new technology, the opening of new markets, or a change in the macro-economic policy framework. When this happens, efforts are required to assure that the development impact is maximized and the development process institutionalized, but until it happens, creating self-managed local organizations will not have much impact in terms of self-sustaining development.

A final point is that the premise underlying local organization development, i.e., that sustained rural development cannot be achieved without local participation, is valid and should be applied to all aspects of rural development projects. This means that all project interventions must involve the beneficiaries in a meaningful way. A CVF for instance, should not be opened unless the village understands the benefits to be obtained and agrees to assume certain responsibilities including: 1) contributing to the expenses of the CVF, 2) selecting appropriate trainees, and 3) assuring that any credit provided to the trainees and others in the village will be repaid in a timely manner. Similarly, the provision of credit or agricultural inputs to a village should not take place unless the villagers have a clear idea of what they are committing themselves to and agree to contribute a significant amount of their own resources at the outset. In this sense, local organization development should be an integral part of all project activities rather than a separate project objective or component.

LESSON THREE

Integrated rural development projects must be properly phased and have a flexible design. Strong goal oriented management and technical assistance is particularly important for this type of project.

The Need for a Flexible Design

Very early in the project it became clear that there were serious flaws in the project design. On the one hand, the stated project purpose was to institutionalize a self-sustaining rural development process. On the other hand, the project activities were all oriented towards increased agricultural production and the major progress indicators related to extension, input distribution and credit. These included:

- o the number of CPT graduates
- o the percentage of graduates applying the technical package on their fields
- o the number of animal traction units distributed
- o tons of fertilizer distributed
- o amount of credit disbursed
- o number of cooperatives formed

These targets assured that the project would be implemented as an agricultural production project rather than as a project concerned with institution building, local participation, and self-sustained development. As a result issues such as whether the technical package was appropriate, whether the CPT-based extension system was effective, or whether local organizations were being strengthened for the right reasons were not being addressed.

The proper targets for the project during the early years should have been:

1. adapt the technical package to the project area,
2. develop an effective agricultural extension system,
3. identify viable activities for local organizations and provide training and other assistance to these organizations on a selective basis, and
4. strengthen government services as necessary to assure the proper implementation of project activities.

These targets would have required project management to step back from the quantitative targets, and focus on the premises underlying these targets and the institution building required for sustainable development. Once the above objectives were achieved or well underway, it would have been appropriate to establish quantitative impact targets.

One lesson from this experience is that, by concentrating on large scale production-increasing interventions before laying the necessary institutional and technical groundwork, NDD put the cart before the horse, and as a result wasted a lot of time and resources. Another equally important lesson is that it is not always clear at the beginning of a project what the appropriate targets and priorities should be. It is therefore essential that provision be made to change targets and priorities from time to

time even if the overall objective remains the same. It is also essential that project management focus on objectives rather than activities. Even when an activity is being implemented properly, if it is not contributing to project objectives it needs to be changed. The NDD experience shows how critical this is to project success.

Table 2 presents key events related to changes in design during the life of the project. The decision to base the project on CPTs was made in the first year of the project, and three CPTs were built in 1979. This in turn created the need for a large scale input distribution and agricultural credit component. No major questioning of this strategy occurred until an outside AID audit in late 1982. The audit was shortly followed by the First Interim Project Evaluation. These two outside studies found that the project had serious design and implementation problems, which led to a redesign of the project during 1983 and 1984.

In 1983, the Ithaca International study of the technical package found that that it was uneconomic in most of the project area. In late 1983, AID prepared a Revised Implementation Plan which deemphasized the original production-oriented targets and adopted new institution building targets that were better indicators of progress toward self-sustaining development.

1984 was the first year of a considerably redesigned project. Major problems were addressed and the following important decisions were made:

- o The institution building objectives of the Revised Implementation Plan were given top priority.
- o A determined and systematic effort was made to involve the government services in the planning and implementation of project activities.
- o The decision was made to provide technical assistance through an institutional contract instead of through individual personal service contracts.
- o The decision was made to add the prototype animal traction workshop to the project.
- o The first CVFs were opened and the decision was made to close some CPTs.

Table 2

Key Events and Design Decisions

Beginning of Phase I	early 1978
First CPTs built (3)	1979
Start of Phase II	early 1981
CPTs built (4)	1982
Zinder Conference	1982
USAID audit	late 1982
First evaluation	early 1983
Economic study of tech. pack.	1983
CPTs constructed (3)	1983

Revised Implementation Plan	1984
Decision to have an institutional contract for technical assistance	1984
New project director	1984
First CVFs opened	1984
Second evaluation	late 1984
Arrival of DAI team	early 1985
Animal traction workshop added to project	early 1985
Study of local organizations (Charlick Study)	1985
Four CPTs closed	1985
Agro-ecological study	1985
Decision to have 2-year extension for phase II	late 1985
Start of the test villages	1986
Start of FIL	1986
Three CPTs closed	1986
Last of the CVFs opened	1987
One ox traction introduced	1987
Reconfirmation of decision not to have a third phase	1987
Last of the CPTs closed	1987

These decisions were put into effect in 1985. The DAI technical assistance team began work in January, construction started on the animal traction workshop, the agro-ecological study of the project area was carried out, four CPTs were closed, and the attempt to create a credit management and input distribution capacity in large numbers of cooperatives was abandoned. In 1986, NDD initiated on-farm trials in six test villages as recommended by the agro-ecological study, three more CPTs were closed, the animal traction workshop began producing one ox equipment, and a small fund was created to finance locally-initiated micro-projects. The activities and new directions initiated in 1985 were continued until the end of the project in 1988.

One notable lack of progress during this period was in the technical package being extended by the project. By 1988, most CVFs still had not started extending technical innovations that addressed actual production constraints in the villages where they were located. This would have required more experience with the test villages and stronger links between the extension and applied research components of the project. Also, more progress would have occurred along these lines if the technical assistance team had included an agricultural extension advisor.

The final point regarding the redesign process is that NDD has been on the right track only since 1984. In late 1985 there were still enough unresolved issues for AID to decide to extend the project for two years rather than approve a third phase. Since then, impressive progress in addressing rural development constraints in Niamey Department has been achieved. All components of the project are now more effective than they were in 1984 although they are far from being as effective as they should be. However, for AID it is a case of too little too late. In 1987 the final decision was made not to continue the project beyond December 1988. If the progress that began in 1984 had started two years earlier, it is likely that in late 1985 AID would have decided to fund a third phase. As it is, the project will now come to an end just as it is beginning to show concrete accomplishments.

The Need for Strong Goal-Oriented Management

In reviewing the sequence of events in this project, one major issue is why it took so long to arrive at the decisions that were made in 1984. Many of the basic problems had been raised in the Phase II Project Paper and should have had the attention of project management from the outset. A goal oriented project management would have begun identifying problems in 1981. Project targets could have been revised as early as 1982, and an increased emphasis on FSR/E could have started at that time. If this had occurred it is likely that at least two CPTs would not have been constructed (Tondikwindi and Chiwil), two ox traction and widespread fertilizer use would have been deemphasized sooner, and fewer resources would have been allocated to credit and input distribution.

It must be noted, however, that these changes would have required a major effort on the part of project management, AID, and the technical advisors. The commitment on the GON side to the fixed technical package was very strong and there was also political pressure to carry out visible interventions (e.g., CPTs, office buildings and cooperative warehouses) throughout the project area. A further consideration is that many of the project approaches had been carefully selected to address serious long-standing problems in Niger.

The CPTs, for example, originated because it had become clear that the extension program could not directly reach all farmers in Niger. The CPTs were intended to provide in-depth training to a relatively small number of farmers who could return

to their villages where they would have a multiplier effect as demonstration farmers. Aside from the technical package, which was inappropriate, the system did not work because 1) the trainers were too young to have the respect of their neighbors, and 2) they did not receive follow-up support from the Agriculture Service. Rather than immediately give up the CPT concept, the project understandably made efforts to upgrade the level of trainee and improve the support from the Agriculture Service. Only when it became clear that the the CPT concept was based on false assumptions regarding the willingness of established farmers to attend CPTs and the ability of the Agriculture service to provide follow-up extension support did the project switch to CVFs.

Under these circumstances project management could not have brought about all of the necessary changes without a compelling case being made by a strong technical assistance team and strong policy-level support from AID. The technical assistance to this project was greatly strengthened by the decision in 1984 to use an institutional contract instead of individual personal service contracts. This change had three major effects on the management of the project:

1. The AID project officer was freed up from the onerous task of managing several long-term contracts as well as identifying and negotiating contracts with a large number of short-term consultants. By contracting with an institution to provide all of the necessary expertise, the project officer was able to better focus on substantive issues affecting the project.
2. The Chief of Party of the technical assistance team was also the senior advisor to the Project Director. In that capacity he oversaw the setting of annual and medium-term objectives and the planning of activities to achieve those objectives. This greatly improved the decision making process, since the Project Director was now much better able to perceive the relationship between proposed changes in activities or resource allocations and the achievement of project objectives.
3. The DAI team was hired to carry out a comprehensive program as described in the AID request for proposals, the DAI proposal, and the subsequent contract terms of reference. Each individual had a set of duties that fit into an agreed upon strategy understood by DAI, AID and project management. This meant that there was a common perception of how each activity contributed to overall objectives, something which did not exist prior to 1985 when only the AID project officer and the GON Project Director really understood project objectives and rationale. This again helped the decision making process to focus on objectives rather than implementation.

AID management of this project evolved from close day-to-day management during the early years to the more traditional monitoring of project activities at the end. The first two project managers acted as advisors to the Project Director and participated in the internal management of the project. During 1983 and 1984, the AID project manager was instrumental in implementing many of the recommendations of the 1982 audit and the 1983 evaluation. With the arrival of a new project officer in 1985 and the start of the institutional technical assistance contract, AID took less of a hands on approach. During the final three years, i.e., after the decision not to fund a third phase, AID generally lost interest in the basic objectives of the project and became primarily concerned with implementation issues and arrangements for the transfer of activities to the GON.

The most significant AID management action was the decision in 1984 to redesign the project. This changed NDD from an agricultural production project to an institutional development project, led to the 1984 actions described above, and made possible the accomplishments of the 1985-1987 period. This is the type of intervention that should have occurred more frequently during the life of the project. A major role of AID, as the primary source of funding, should be to monitor progress toward the achievement of project objectives, and to take corrective action when necessary. This would involve 1) making sure that basic design and implementation issues are addressed by project management in a timely and effective manner, and 2) intervening at ministerial levels on behalf of the project when necessary. These roles were never clearly spelled out with respect to the NDD project.

LESSON FOUR:

Implementing integrated rural development projects through existing government services seriously delays implementation and does not assure institutional sustainability.

LESSON FIVE:

The key elements in assuring the institutional and financial sustainability of rural development projects are 1) clear successes and 2) open communications with government institutions long before the end of the project. Even then, under conditions that prevail in Niger sustainability is unlikely.

An important element in the NDD strategy was to implement project activities through existing government services. This would help assure that the government services were familiar with project objectives and would be committed to continuing the activities after the end of the project.

Until 1985, the project depended on government services for the following activities:

- o the Agriculture Service for extension support to CPT graduates
- o UNCC for cooperative training and input distribution
- o CNCA for agricultural credit
- o the Literacy service for literacy courses
- o the Livestock Service for livestock production activities
- o the Animation (community development) Service for local organization development
- o the Water and Forest Service for soil and water conservation activities.

The result of this strategy was a weak management structure. The only way for project management to assure proper project implementation was to be given direct authority over the government service staff working on project activities. Since the project never received this authority, the only alternative was to persuade the Department heads of the services to participate in the implementation of project activities using project resources. This was clearly a second best solution and proved to be totally unsatisfactory. The services would accept the project resources and not carry out the activities. This caused continuous implementation delays and was a constant source of frustration for the staff and management of the project as well as for AID.

From the standpoint of the project, this problem was attributable to the low level of competence and low motivation of the government services. From the standpoint of the services, however, the problem is more complex. These services did not see NDD as their project and were not committed to its objectives. They found it difficult enough carrying out their own programs without taking on additional tasks. The situation would have been different if their respective ministries had instructed them to give project activities the same or higher priority as their ongoing programs. However, since only AID, the technical assistance team, and project management had a real commitment to the project objectives, it is not surprising that the ministries concerned did not place NDD activities ahead of their own programs. This was despite the fact that the GON had signed a grant agreement which included a detailed description of project objectives and activities.

In fact, most project activities represented significant departures from ongoing government programs. The government services were at best indifferent and at worse hostile to most of these new approaches. Furthermore, many of the proposed changes were untested and not necessarily improvements over existing programs. Under the circumstances, it was unrealistic to expect the services to implement project activities with great enthusiasm. A more realistic approach would have been to place implementation responsibility entirely within the project, where the objectives and experimental nature of the activities were well understood. This would have led to a more efficient use of

resources, more rapid implementation of project activities, and more concrete accomplishments by the scheduled end of phase II in 1986.

It must be recognized that the effort to implement project activities through existing services addressed a very real problem. Virtually none of the activities initiated by the large regional production projects in Niger were able to continue after the projects ended. One obvious reason was that the government services had had no involvement in project activities and therefore could not be expected to be able or willing to continue them. The commitment to avoid this problem was central to the project strategy, and the project was willing to accept slower implementation as long as they thought their efforts would eventually succeed. When, after two years of particularly determined efforts (1984 and 1985) it became clear that the project and the government services had quite different interests, the decision was made to build an implementation capacity within the project.

This decision, however, did not mean that institutional sustainability objectives had to be abandoned. There was nothing to prevent the project maintaining contact with the government services, sharing results, asking for comments and suggestions, but maintaining control over implementation. Attempts to transfer project activities to the government services should begin only after there have been clear successes. For NDD, clear successes would have been the identification of improved agricultural practices suitable to the project area and the subsequent adoption of those practices, a functioning farming systems-based extension program, and numerous local organizations successfully implementing viable micro-projects. By assigning implementation responsibility to government services prior to achieving these successes, the project made its task almost impossible. There is no way that project objectives could be achieved if project activities could not be implemented. In the end, the most successful activities were those implemented by the project itself.

It must be emphasized that even with the best efforts of all parties, the sustainability of rural development projects under conditions that prevail in Niger is almost impossible. This is because all of the government institutions responsible for rural development are understaffed and underfunded. The causes of this problem are related to resource constraints at the national level and cannot be addressed in the context of rural development projects. In Niamey Department all of the services suffer from lack of implementation capacity. The staff are not adequately trained for many of their responsibilities and do not have access to the transport, materials and supplies needed to carry out their tasks. Almost all of the local costs of the NDD project were funded from AID-generated funds. This was necessary because the GON could not finance these expenditures from their own resources; the end result is that project activities will continue only if they are funded through other foreign aid projects.

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