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PROJECT ACTIVITIES
COMPLETION REPORT

Niger Integrated Livestock
Production Project (ILP)
(683-0242)

ILP Completion Report
APRIL, 89

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PROJECT ACTIVITIES COMPLETION REPORT (PACR) FOR THE NIGER INTEGRATED LIVESTOCK PRODUCTION PROJECT PROJECT NUMBER 683-0242

I. INTRODUCTION

This part of the report defines the purpose of the report, describes the report's organization, and gives a synopsis of the project's history.

A. Purpose of Report

The purpose of this report is to review the Niger Integrated Livestock Production (ILP) project, Number 683-0242, following the guidelines for a "Project Activities Completion Report" (AID Handbook 3, Appendix 14 A). This report briefly outlines the history of the Project, summarizes the current Project status, and discusses aspects of continuing Project activities.

B. Organization of Report

This report is divided into three major parts and includes three appendices.

The first section of this report (i.e., the Introduction) gives a synopsis of the project's background.

The second part of this report consists of a summary of the project's current status. This is divided into three sections concerning original and revised project activities, respectively. The first section deals with original project components described in the Project Agreement. The second section describes the revised project components following the project mid-term evaluation and redesign guidelines issued by USAID/Washington. The third section examines the actual accomplishments of the project as of the December 31, 1988 PACD.

The third part of the report addresses lessons learned during the life of the project in the area of program/design and implementation.

There are four appendices to the report.

Appendix A gives the history and status of commodity procurement for the project.

Appendix B is a financial review. The appendix discusses the project accounting/financial management system, gives a summary of completed and pending payments.

Appendix C provides details of Project Implementation Orders/Participants

Appendix D is a listing of ILP project documents that are to be retained for future monitoring and evaluation purposes, materials to be disposed of, and files to be retired to storage.

Appendix E addresses technical assistance inputs to the project as provided by Tufts University and its subcontractors.

C. Background

This section provides basic background information on the project. A brief history of the livestock sector, project implementation and evaluation history, the original purpose of the ILP project and the revised project description (goal and purpose) are described.

1. Sectoral Background

Since the Integrated Livestock Production project was authorized in 1983, the pastoral zone was hit with a devastating drought which profoundly affected the entire way of life of the pastoralists, as well as wiping out half the national herd. It also had a severe impact on project implementation, since many activities could not be implemented. Livestock production contributes a major share of Niger's GDP, varying between 14 and 19 percent depending on drought conditions. Livestock is the country's second largest export providing more than 10 percent of export earnings. Animals provide a major part of the livelihood for about 30 percent of the population, and of these about one third are sedentary farmers. The situation has become precarious, however, as a result of the disappearance of the southern pastures which provided dry season relief for the northern herds. Overgrazing, cultivation and lower than normal rainfall have increased competition for those southern pasture reserves and resulted in severe depletion.

The evidence suggests that the national herd cannot increase substantially above the 1968 level without supplemental feeding, major range improvements, or other technological breakthroughs. Transhumant herders were particularly hard hit by the 1984 drought, in that the entire capital stock of many pastoralists was wiped out for the second time in a generation. The great drought of the late sixties-early seventies left many pastoralists without the means to carry out their likelihood; as a result, many herded animals for others, including civil servants. The above and other factors contributed to a surge in population movement to towns. The 1984/85 drought caused a disastreous drop in the herder's terms of trade, split families (women and children remained behind with no way to earn a living by producing milk and meat) and drastically reduced the general nutritional status of pastoralists' children as compared to those of sedentary farmers. Income discrepancies have widened greatly.

The pastoral zone is generally perceived to be within climatic zone which is too arid to support active cropping or forestation efforts. Crop production in the marginal arid areas results in increased soil erosion, thereby reducing further the carrying capacity of the national range. Dry season irrigated gardening at seasonal lakes blocks livestock access to those critical dry season forage and water areas. The most obvious effect is the direct loss of rangeland to crop production, exacerbated by the fact that the most fertile and productive range sites are taken for cropping. The remaining poorer range sites are often inadequate to support current livestock production levels. The removal of these small areas of rangeland can affect the utilization of much larger surrounding areas.

2. Project Implementation and Evaluation History

The Integrated Livestock Production (ILP) Project was authorized on August 15, 1983 in an amount not to exceed $17,500,000. The Grant Agreement was signed on August 16, 1983 with a PACD of December 31, 1988. A total of $13,394,000 was obligated under this phase.

The ILP Project is the successor to the Niger Range and Livestock Project (NRLP) which was completed in December 1983. ILP was based upon the research and pilot activities conducted under the NRLP.

D. Original Goal:

The original goal of the Integrated Livestock Production project was to contribute to the AID and GON goals of increasing the well being of pastoral zone inhabitants and the contribution of the pastoral sector to the national economy in a way that is technically, financially and institutionally sustainable over the longer term. This would require improving the management of the natural resource base; development of appropriate livestock technology and the institutions to devise, test and transfer that technology to the herders; and modification of government policies in ways that would develop private sector initiative and improve the ability of the pastoral sector to finance directly its own development.

The attainment of these goals would be reflected in measurable increases in meat and milk production within the pastoral zone, the increased purchases of basic production and consumption goods by livestock owners and producers and, in general, increased skill levels throughout the zone. A useful indicator of the achievement of these goals was to be lack of chronic food shortages as evidenced by stable food prices and a positive balance of trade in basic food items (i.e. value of food "exports" from the project zone would exceed the value of food "imports" into the zone). Research studies were to continue to develop the required baseline attained. Assumptions for achieving those targets were that 1) the GON commitment to promoting food self-sufficiency remained high, 2) the marketing system maintained at least its then current level efficiency, and 3) the climate, rainfall and

environment would not significantly worsen as a result of external circumstances. The GON was to also maintain an open attitude and dialogue toward policy reformulations particularly as concerns the expanding role of the private sector and livestock trade.

E. Original Purpose:

The original purpose of the Integrated Livestock Project was to establish a herder organization structure that will serve as a vehicle for the testing and transfer to herders of technical, financial and managerial innovations; to increase the capacity of the GON to provide services to the herders through this structure, to assist the GON in establishing a policy environment conductive to the achievement of this program objective; and to assure that this structure, capacity and environment continue to be maintained after the project is completed. The six major components of the project were Herder Organization Development, Animal Health and Production, Natural Resources Management, Marketing Research, Human Resources Development and Project Management.

F. Original Conditions Precedent and Special Covenant

Conditions Precedent

First Disbursement

Prior to the first disbursement of the Grant, or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made, the GON will, except as A.I.D. may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(1) An opinion of counsel acceptable to A.I.D. that this Agreement has been duly authorized and/or ratified by, and executed on behalf of the GON, and that it constitutes a valid and legally binding obligation of the GON in accordance with all of its items;

(2) A statement of the names of the persons holding or acting in the office of the GON specified in Section 8.2, and a specimen signature of each person specified in such statement;

(3) Evidence that a Nigerien Project Director has been assigned and delegated all necessary authorities required to implement the Project;

(4) Evidence that the GON has established an accounting system for the control of project funds which meets with standard as described in Section 121 (d) of the Foreign Assistance Act.

(5) Evidence that the GON has established a property management system and a security system for the procurement, control and security of project assets which meet with accepted standards for such systems, as judged by A.I.D.;

(6) Evidence that the GON has created and undertaken necessary steps to implement an effective Interministerial Coordinating Committee (ICC) consisting as a minimum of the Ministers of Rural Development, Health, Education, Higher Education and Research, and Plan to perform appropriate project coordinating functions.

Special Covenants

1. Project Evaluation

The Parties agree to establish an evaluation program as part of the project. Except as the Parties otherwise agree in writing, the program will include, during the implementation of the project and at one or more points thereafter: (a) evaluation of progress toward attaintment of the objectives of the Project; (b) identification and evaluation of problem areas or constraints which may inhibit such attaintment; (c) assessment of how such information may be used to help overcome such problems; and (d) evaluation, to the degree feasible, of the overall development impact of the project.

2. Assignment of Personnel

The GON agrees to provide to the project the full-time personnel including counterparts to all long-term contract advisors necessary to the effective functioning of the project during the life of the project and assign these personnel for a period of not less than three years:

3. Assignment of Participant Trainees

The GON agrees to assign to the project those participant trainees who return to Niger between training/education sessions on vacation in Niger in accordance with Nigerien regulations.

4. Subsidy Policies

The GON agrees that the Project will be charged the full unsubsidized cost of all animal medicines and food grains purchased by the project and that the project will be permitted to make a surcharge thereon to cover losses and delivery costs.

5. Review of Policy Issues

The GON agrees to review annually with A.I.D. policy issues which include but are not limited to financial support of the Government to the

project, the role of the private sector in the distribution of inputs, herder responsibility for the treatment of their animals, the role of government ranches, and the direction of GON water policy as it pertains to the pastoral zone.

6. Recurring Costs

The GON agrees to review with A.I.D. in January of each year the recurring costs budget of the project (including the recurring costs of the project both for the preceeding 12 months and the upcoming 12 months).

7. Use of Two-Way Radios

The GON agrees that the Project may import and use two-way stationary radios for project use.

8. Interest Rates of Credit Program

The GON agrees that in order to avoid decapitalization of the credit funds, the interest rate to be charged borrowers of the project shall at all times reflect the full and true costs of credit to the project sufficient to cover (1) inflation, (2) administrative, and (3) the rate of default. The GON also agrees to work with A.I.D. in recommending the means by which the project credit system can be taken over by a Nigerien credit institution.

9. Livestock Export Trade Policies

The GON agrees to consult with A.I.D. to provide to A.I.D. all necessary information on livestock trade and livestock export trade policies with the view of developing exports and removing market restrictions, and to review this subject with A.I.D.

10. Environment

The GON agrees that, prior to the initiation of any project activity which could revise grazing patterns, develop a well, or otherwise alter the physical environment, an environmental impact statement shall be prepared which clearly displays any potential impacts, positive or negative, which such activity could have on the physical biological and human environment. Such an environmental statement shall also show what mitigating actions could be taken to minimize any potentially adverse impacts thereby serving as the basis for any required project modification in the interest of preserving or enhancing the environmental integrity of the project zone.

11. Procurement of Veterinary Supplies

The GON agrees that the project may procure veterinry commodities and medicines for project use from any source whenever such commodities and medicines or their equivalent cannot be procured from VETOPHAR.

All of the above Conditions Precedent and Special Covenants except for the use of two-way radios were met or became non-applicable after the project was evaluated and redesigned. The radios were not purchased by the project as permits for them could not be obtained from the Government of Niger.

G. Revised Project Description

An audit of the ILP Project was conducted in September, 1984. The draft audit report raised major issues concerning lack of agreement on project objectives and the viability of the project in view of the effects of the 1984 drought. On the basis of Government and USAID actions taken and planned, all of the audit recommendations were closed except for one. The sole recommendations of the final audit report required that the project be redesigned to effectively and economically benefit the project zone.

A mid-term evaluation of the ILP project was conducted in October and November 1985 to provide the basis for the redesigned project. The AID/Washington review of the evaluation report was held on May 18, 1988. The Executive Committee for Project Review (ECPR) concluded the following:

1. That the remaining two years of the project should focus on assisting the newly created Ministry of Animal Resources/Hydrology (MAR/H) to develop its capacity in policy analysis:

2. That the marketing research information system, the development of a thermostable rinderpest vaccine, the biomass monitoring/early warning system, policy dialogue and participant training continue until the PACD of December 1988;

3. That training of veterinary auxiliaries, browse/water point research, training of nurses and a modest amount of construction phase out from September 1986 to December 1986; and

4. That all other activities be phased out immediately.

The conclusions of the ECPR were based on 1) USAID/Niger's planned continuation of its policy dialogue and reform effort under the second phase of the Agricultural Sector Development Grant (ASDG); 2) project activities which have been successful to date and which facilitate policy dialogue in the area of livestock; and 3) activities such as research which are consistent with the recommendations of the AID task force on AID's program strategy for rangeland management and extensive livestock production in sub-Sahara Africa.

State 164813 dated May 24, 1986 gave approval for a third technical assistance position for the remainder of the project. This person was responsible for coordinating field studies upon which to base livestock policy recommendations.

H. Revised Goal

The sector goals to which the revised ILPP contributed are:

1. To establish development policies for the livestock subsector that increase the subsector's productivity and rural incomes while balancing the number of animal units within the environmental constraints of the rangeland; and

2. To strengthen the ability of the GON's line services to develop self-sustaining rural organizations to increase rural increase productivity and rural incomes within the limits set by environmental constraints.

I. Revised Purpose

The purpose of the revised project is to assist the Government of Niger in building up the capacity Des Etudes et Programmation (DEP) within the Ministry of Animal Resources/Hydrology to undertake basic studies and analyses to form the basis for policy recommendations made by the MAR/H. The project will establish strong institutional linkages between policy-making and this informational linkages between policy-making and this informational and analytical base. Disciplinary skills and perspectives to be developed at the DEP include economics, financial analysis, computer systems, veterinary epidemiology, statistics, and survey methodology. The project will also continue to develop:

- a nation-wide market information collection system;
- a thermostable vaccine against rinderpest; and
- a pastoral zone Early Warning System integrated into the Government of Niger's decision-making system.

The Government of Niger is in the process of developing a long-term strategy and appropriate national policies for the development of the pastoral zone. Toward this end, the Government has held a national livestock debate and national workshop on the subject of livestock policy since April 1985. Recognizing the importance of a strong informational and analytical base for sound decision making, the Government has requested AID assistance in strengthening the MAR/H's policy analysis capability.

The MAR/H was created by the Government of Niger in late 1985 to manage livestock production and marketing activities. Formerly the Ministry of Rural Development was charged with this responsibility. In addition to overseeing the National Livestock Services, the MAR/H reviews and analyzes policy in the livestock sector and recommends courses of action for policy changes to the national law making body, the National Council of Ministers.

J. Revised Conditions Precedent

Prior to any disbursement for local currency expenditures after 31 December 1986, or to the issuance by A.I.D. of documentation pursuant to which such disbursement will be made, the Grantee will, except as the Parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:

1. Evidence, in the form of a letter or decree a committee in the Ministry of Animal Resources for the monitoring and management of the project computers located in Niamey and throughout the project zone. This committee shall also insure that all reports, information systems and date generated with the computers are distributed in a timely manner to participating services and interested parties; and

2. Evidence, in the form of a letter or decree, that the Government of Niger has established a committee in the Ministry of Animal Resources for the implementation and monitoring of the early warning system for the project. The committee is to insure that all arrangements for aerial surveys, ground truthing, data interpretation, reports and training of personnel are carried out in a timely manner.

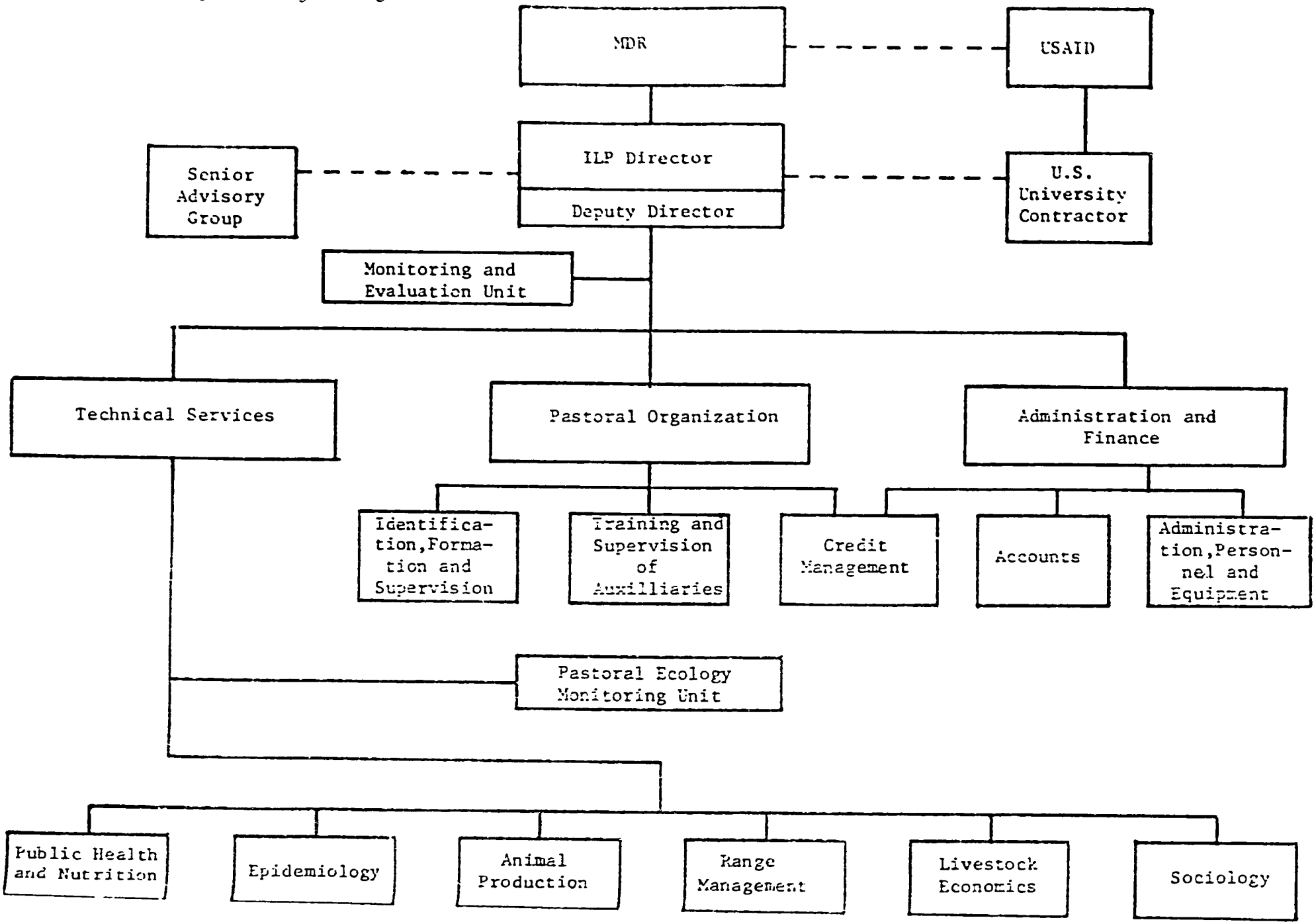
All of the Revised Conditions Precedent were satisfied by the MAR/H.

During the life of the revised project AID financed the services of a livestock policy advisor, a marketing economist, a veterinary epidemiologist, a vaccine production technician, short term technical assistance, training, commodities and a modest amount of construction to assist the MAR/H.

II. PROJECT STATUS SUMMARY

This part of the report contains three sections. The first section (A) concerns the original project components as cited above under the Original Purpose. Each component describes what was to be accomplished under the original project design. The second section (B) addresses the redesigned project components and, what they were to accomplish. The third section (C) addresses actual Project accomplishments as of the PACD, December 31, 1988, and post PACD activities and recommendations by USAID to support those activities. This section also includes all participant training projections for both the original and the redesigned projects.

Original Project Organization



A. Original Project Components and Activities as Described In the Project Agreement.

1. Herder Organization Development

Ten pilot herder associations were established under NRLP/ILP was to have formed 110 additional associations during a period of 5 years, grouped into eight Pastoral Centers. 18,000 herders were envisioned to belong to the associations by the end of the project.

An integral part of the herder associations was to be a credit program. The program was to be divided into two separate revolving funds; the first to assist herders to increase herd productivity by financing the purchase of animals and livestock inputs; and the second to permit herders to purchase and store cereals in a timely manner so as to avoid forced sales of animals at low prices at the end of the dry season. The loans required to finance the funds were to be repaid to the project over a period of six years at a rate of interest sufficient to cover inflation, default, and administrative costs at tbe local level. With profits on sales of animals and cereals for their members, the associations were to create revolving funds. Repayment to the project was to be used to finance the creation of these revolving funds for support of additional associations. Information gathered under the NRLP socio-economic research program was to be continued under ILP with the active participation of Niger's research institutes. Major research was to be focused on project zone inhabitants not studied under NRLP in order to expand the area in which herder associations could be established to cover the entire zone. There were to be additional studies on womens' activities and a demographic survey. The socio-economic research team was to also monitor project activities to ensure that these contributed to project goals.

2. Animal Production and Health

The project was to establish an effective low-cost veterinary health care delivery system. The system was to consist of volunteer veterinary auxiliaries from each herder association who would act as liaison between the associations and the GON Livestock Service. The auxiliaries were to be trained to apply herd health and preventive medicine techniques, to treat a few easily diagnoseable conditions, and to report outbreaks of disease.

The auxiliaries were expected to increase the effectiveness of the Livestock Service personnel by allowing GON professionals to undertake more demanding duties and to reach a far greater number of beneficiaries than they were able to do in the past.

Livestock inputs such as vitamin, mineral and protein supplements were to have been made available to the herders through the associations revolving fund under the credit program.

The project was to develop and introduce epidemiology and theriogenology (reproduction) unit to focus on identifying problems and providing solutions for animal nutrition, habitat utilization, disease and animal reproduction. The program was to be interdisciplinary and utilize findings from sociology, economics, range science and management.

The project was to develop a thermostable rinderpest vaccine for production in Niger and other African countries. The vaccine was to be jointly developed by the GON, the project and the USDA Plum Island Animal Disease Control Center. The effort was to eliminate the need for refrigeration (Cold Chain) used for vaccine delivery and thus greatly reduce the high recurrent costs of vaccination campaigns.

In conjunction with the rinderpest vaccine, an effective vaccine for small ruminant pest (PPR) was to be developed by the project.

3. Natural Resources Management

The project was to use and expand information on forage projection and water point management gathered under NRLP.

Studies on waterpoint distribution and seasonal use were to be conducted. Species trials for indigenous and exotic forage plants were to be established. Techniques to increase water and forage production as well as control of grazing and waterpoints were to be investigated and tested.

In order to implement the above, aerial surveys and an inventory of natural resources, resource use and socio-economic information were to be conducted.

The project was to establish a program for the listing, evaluation and eventual extension of improved range management techniques through a network of Pastoral Centers to those herders who could benefit from them. Specific range management strategies were to be tested under controlled conditions and promising strategies were to be tested within the context of experimental herding units. Proven range management strategies were to be extended to the herder associations through the Pastoral Centers.

ILP was to have established a pastoral early warning system designed to assess the distribution of range resources and to determine their seasonal evolution in terms of forage quantity and quality. The system was to relate these expected resources to their utilization patterns, and to assess more generally the pastoral production and food security situation in the zone. The main elements of the system were to include green biomass estimates from satellite imaginery during the growing season, systematic reconnaissance flights, and ground monitoring of biomass evolution in selected sample areas. These data were to be combined with other data sets (rainfall, sex, age and

prices of livestock marketed, slaughtered and exported; animal production and diseases; human health and nutrition and a Pastoral Food Security Index developed to provide regular pastoral monitoring information for the GON, donors of aid, and the herders.

4. Marketing Research

ILP was to assist the GON to upgrade the collection, verification, analysis and timely reporting of data on livestock presentations and the prices of livestock, meat and cereals in key markets both within and outside the project zone. ILP was to computerize this information along with Livestock Service market records. In order to monitor food security in the project zone and to give several months warning of the development of serious food shortages, a Pastoral Food Security Index (PFSI) was to be developed based upon prices of animals, cereals and other key commodities actually received and paid for by the herders associations. The information was to be computerized and a monthly PFSI calculated for various parts of the project zone. PFSI data was to be used in the development of the early warning system.

Additional activities were to include the construction of a series of marketing systems models and the analyses of marketing data obtained by the socio-economic research team in order to identify potential marketing interventions. Marketing policy issues were to be identified and discussed with the GON in a continuing dialogue centered on an annual in-country conference and evaluations.

5. Human Resources Development

During the course of the project design, a need to address the proportional contribution of special disease entities, or of seasonal variation in illness and undernutrition on herder output was identified. These areas of were to be approached as were the other technical component problems. Health problems were to be identified, practical interventions proposed, field tested, limited implementation with the socio-economic evaluation, and then, if appropriate, full implementation applied.

The health services infrastructures in the project zone was to be strenghtened with the construction of two dispensaries. Training of health auxiliaries from the herders associations by nurses from the Pastoral Centers in the basic recognition of the most common health problems, the application of simple treatment procedures for fever, diarrhea, joint pain, eye infections, and wounds, as well as the recognition of more serious illnesses was to have taken place.

Systems for improved maternal and child care by pastoral women was to be developed by project staff in collaboration with Ministry of Health nursing and midwifery personnel. Techniques for improved birthing and infant sanitation were to be tested and implemented as acceptable approaches were identified.

The project was to assist the National Literacy Service to conduct various functional literacy, post-literacy, and extension education activities at each Pastoral Center. The literacy program was to begin with a basic system of accounting and proceed to reading and writing in Fulfulde or Tamasheq. Students were to come from the herders associations and the graduates were to teach others in their camps.

6. Project Management Component

The purpose of the Project Management Component was to assure that the project successfully attains the project goal and purpose by providing continuous supervision of all project activities, by monitoring those activities and their impact on the herders and the Nigerien economy. The Project Management Unit was to evaluate the activity impacts to assure that they were consistant with the Project Paper as modified by AID and the GON subsequent to the signing of the Grant Agreement.

Project management was to be the responsibility of the Project Director, Chief-of-Party, and the Senior Advisory Group comprised of senior personnel furnished under the technical assistance contract with a U.S. university. The Project Director would be supported by the project staff, including a special Monitoring and Evaluation Unit who were to report directly to the Director. Outputs of the Project Management component were to include the establishment of a management information system, the preparation of detailed management plans, the preparation of monitoring and evaluation reports, and the holding of annual in-country conferences.

A Management Information System (MIS) was to be developed that would provide timely, reliable data and reports for supervision, control, and decision-making. The MIS was to focus on the status of relationships between inputs and outputs, including:

i) the flow and use of finance, equipment, supplies, technical assistance, local personnel, and other resources;

ii) the allocation of resources to different uses and the productivity of those resources relative to planned accomplishments;

iii) progress made in producing outputs and achieving the goal and purpose of the project through the use of these resources.

The MIS was to be prepared by the Project Director and the Chief-of-Party, with assistance from other members of the Project Management Unit (PMU). It was to be submitted for approval to AID and GON by the end of the first quarter of project year.

An annual management plan was to be prepared by the Project Director and the Chief-of-Party, with assistance from other members of the PMU, to serve as the agreed upon means of carrying out project activities. The plan would include the following:

i) An operational plan to identify significant work items, milestones, completion dates, and points of responsibility so that performance can be guided, monitored and controlled.

ii) A financial plan will forecast receipts and expenditures on the basis of the operational plan, permit the tracking of actual receipts.

iii) A commodity plan will forecast commodity needs on the basis of the operational plan and permit the tracking and controlling of commodities from their points of procurement to their end use.

iv) A personnel plan will define all personnel needs, including recruitment, and training, on the basis of the operational plan and permit the tracking and controlling of project personnel and the allocation of their time.

These detailed annual management plans would be based on the Project Paper, as modified by AID and GON subsequent to the signing of the Grant Agreement.

Monitoring and Evaluation Reports

The Monitoring and Evaluation Unit (MEU) attached to the Project Director's Office, was to be responsible for continuously gathering data from the Division heads of ILP and plotting those data against the management plans to see the extent to which there have been deviations from those plans. This information was to be furnished to the Project Director in the form of monthly Monitoring Reports, enabling him to take timely action to correct deficiencies. The MEU would also assemble the results of the field monitoring units as reported by the senior personnel of the Technical Services Division in their quarterly and special report. These reports were to provide data on the allocation of project resources to different uses and the productivity of those resources relative to planned accomplishments. The MEU would then aggregate this information as an input, along with the monthly Monitoring Reports and the annual reports of the project divisions, into annual

evaluations. The end product of each of these evaluations was to be an Evaluation Report submitted to AID, MDR, and the ILP Project Director. This report would, in time, be an input into the reparation of subsequent management plans and the Project Director's Annual Report. In addition to the annual evaluations, special evaluations were to held at the end of Project Years 2 and there was to be a final evaluation at the end of the Project.

In-Country Conferences

In-country conferences were to be held annually for the purpose of presenting and discussing the findings and progress of the project. These conferences were to revolve project personnel and officials from GON and AID, as well as other interested parties. An important aim of base conferences was to focus, with invited GON representatives, on specific policy issues requiring action.

B. REDESIGNED PROJECT COMPONENTS AS DESCRIBED IN THE AMENDED PROJECT AGREEMENT

1. Herder Organization Development

Statement

Abandon all direct efforts to organize new herder groups, but maintain contacts for conducting studies, transferring responsibilities for cooperativization over the National Union of Cooperatives and the technical ministries.

2. Veterinary Epidemiology and Animal Health (Formerly Animal Health and Production)

a. Output Statement: Strengthen GON technical services in specified fields of epidemiology and animal health.

i) Phase-out of veterinary auxiliary training by October 1986.

ii) Development of a thermostable rinderpest vaccine.

iii) Development of small ruminant and camel epidemiology and disease investigation.

b. Objectively verifiable indicators that outputs will be reached by the end of the projects:

i) Veterinary auxiliaries and technical services support:
- 30 additional veterinary auxiliaries trained,
- 65 people trained in veterinary epidemiology,
- 5 mobile vaccination parks provided.

ii) Thermostable rinderpest vaccine,

- Effective thermostable rinderpest vaccine developed and tested.

The Central Veterinary Laboratory (LABOCEL) will be producing an effective thermostable rinderpest vaccine which will eliminate the need for the "Cold Chain" currently used to deliver vaccine to the field. The Government's recurrent costs problem entailed in providing rinderpest vaccinations will be significantly reduced.

iii) Camel and small ruminant epidemiology.

The major constraints to small ruminant and camel production will have been identified and recommendations will have been formulated to address these constraints.

- 65 Nigeriens will be trained in veterinary epidemiology and survey techniques.

- 5 Nigeriens trained in laboratory analyses, field sample collection techniques, small runinant and camel medicine.

An institutional framework for animal disease investigation will he been developed through protocols linking LABOCEL, the antenna laboratories and the veterinary posts for routine diagnosis and management of disease outbreaks.

3. Natural Resources Management

a. Output Statement: Development of the Early Warning System (EWS), which will provide the means to estimate the distribution of forage resources and determine their seasonal evaluation in terms of quantity and quality.

b. Objectively Verifiable Indicators that will indicate that outputs have been met.

i) A system for annual assessments of range resources in the pastoral zone, and capability for rapide reconnaissance in time of deficit will be developed which will serve as the basis for the EWS.

ii) Two people trained in satellite imagery interpretation and computer modelling.

4. National Market Information Gathering System (Formerly under the Marketing Research Component)

a. Output Statement: To establish a national livestock market information system through upgrading the capabilities of the Studies and Statistics Services (SES) within the DEP to collect, verify and report on a timely basis, data on livestock sales and the prices of livestock meat and cereals in key markets throughout the country.

b. Objectively Verifiable Indicators that outputs will be reached by the end of the project:

i) During the next two years the livestock market monitoring system will be extended to the national level and will include all seven departments. Two or three representative markets will be selected from each arrondissement for monitoring on the basis of their size, type (collection, consumption or export market), and geographic location.

ii) A slaughterhouse survey will be initiated first in several test markets and later on a national level to monitor per kilo grain sales and prices of meat to butchers.

iii) By the PACD, the system will be regularly providing quantitative information to MAR officials charged with planning and guiding the development of the livestock sector.

iv) Completion of at least two studies each year related to livestock and marketing.

v) Training of 47 MAR employees in analytical techniques and computer processing of data.

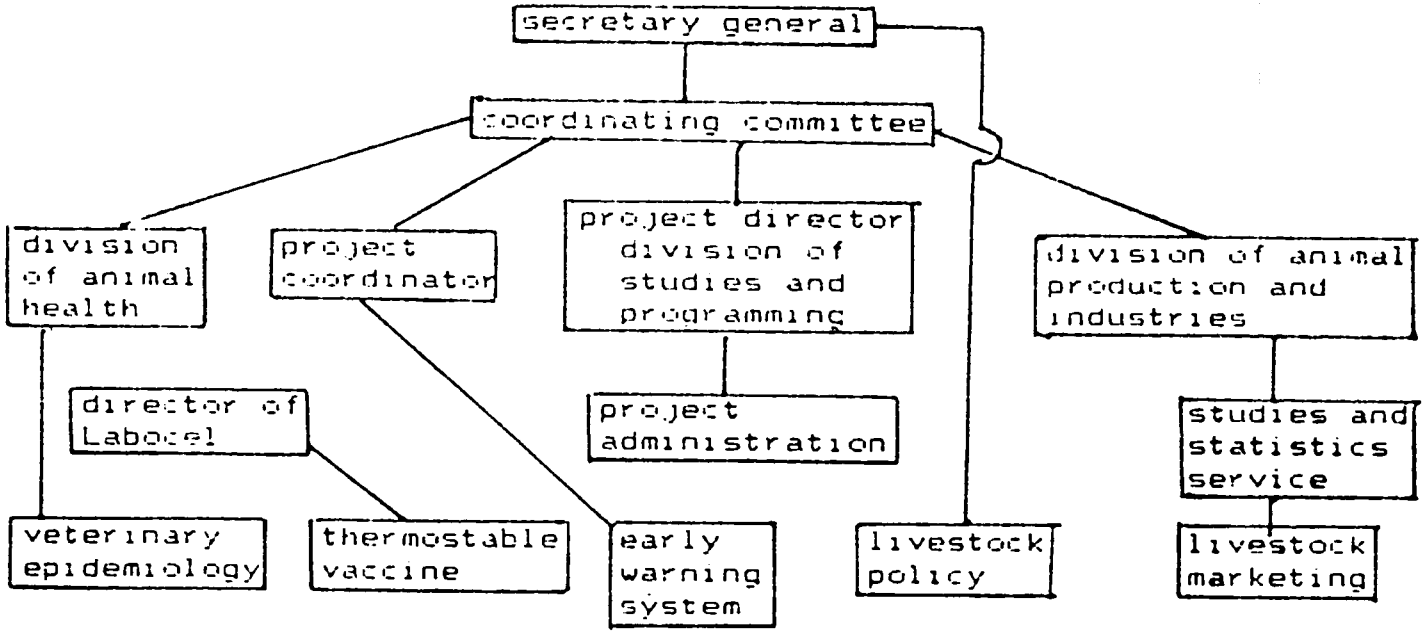
vi) Data generated by the system is fed promptly to technical services for promotion of exports to increase herder incomes, as well as to public information services for broadcast and to the famine early warning committee.

c. Achievement of these outputs should contribute to the following actions outside the direct control of the project:

i) Use of the information to generate livestock policies and programs which increase herder incomes.

ii) Use of the information to increase cross border trade and policy programs under the ASDG.

Redesigned Project Organization



5. Human Resource Development

All activities under this component will be discontinued under the project amendment. During the phase-down period, the project will investigate alternative ways in which human health interventions can be integrated into ongoing or proposed health programs. Relatively little was accomplished in functional literacy activities under the original project activities.

The decision was made in Washington in March 1986 to eliminate the Human Resource Development Component of ILP. Nevertheless, as the evaluation report concluded, "in the area of human health intervention, the project has made effective and sustained progress in attaining component objectives." The report recommended that the project actively participate "in the national effort to develop an effective national health strategy and operational plan for primary health care in the pastoral zone." AID/W recognized this in recommending that the human health component be integrated into the ongoing Rural Health Improvement Project or the proposed Niger Health Sector Support Grant.

During the phase-down period, therefore, the ILP project will examine ways in which human health interventions can most effectively be carried out in the pastoral zone and will offer specific proposals as to their financing.

6. Project Management Unit (Formerly Project Management Component)

This component of the project will be phased-out prior to December 31, 1986.

C. Actual Project Accomplishments and Post PACD Activities

1. Herder Organization Development

In compliance with USAID/Washington's directive to "Abandon all direct efforts to organize new herder groups, but maintain contacts for conducting studies, transferring responsibilities for cooperativization over to the National Union of Cooperatives and the technical ministries", project personnel kept contacts with the previously established herder groups in the project zone and the project produced a study entitled "Cooperative Organization and Natural Resource Management."

The following were objectives of the study:

i) analysis of the organization of herders in the pastoral zone, according to the organizational model adopted, the approach taken by the institutions which took part in the process, and the response of the herders to these efforts;

ii) indentification and analysis of the blocking factors which impeded the process of cooperative organization, development of credit programs and credit management;

iii) presentation of concrete proposals to address the difficulties encountered, and the definition of an approach to strengthen the cooperative organizations in the pastoral zone, including an analysis of the potential for a government-sponsored program for the local management of natural resources.

The study was undertaken by the Directorate of Studies and Programming (DEP) under the direction of Dr. Abdou Nababa, with coordination by Mr. Bagoudou Maïdagi. The field work was carried out by a multidisciplinary team composed of the following persons:

- Pierrette Vu Thi — Sociologist, co-team leader and senior consultant for Tufts University.
- Hassan Beïdou — Sociologist, Pastoral Develpment Service, DEP.
- Ibrahima Garba — ILP project sociologist and co-team leader.
- Dr. Albert Sollod — Livestock policy advisor, DEP

The study was performed in November and December of 1987 and was divided into three phases:

i) Interviews, visits to organizations based in Niamey, and document reviews;

ii) Field trip. The locations visited were in the pastoral zone of the Departments of Tahoua, Agadez, and Zinder. In each of the localities, the administrative authorities, the relevant technical services, and the herder's groups were consulted. The Department of Diffa was not visited because the organization of herders by the Niger Centre-Est project had not yet begun in this region;

iii) Presentation of the results of the study to the DEP and preparation of the final report.

Recommendations:

The attempt to organize Herder Groups should not be addressed by USAID until the GON has established legislation/policy to support such organizations ie. a Cooperative Union for the pastoral zone such as exists for cultivators.

2. Veterinary Epidemiology and Animal Health (Formerly Animal Health and Production)

The thermostable vaccine against rinderpest is being field tested by PIADC and GON personnel. The vaccine is being produced locally at the GON veterinary laboratory beginning in October 1988. The laboratory is now staffed with qualified personnel trained in Niger and Plum Island in vaccine production techniques and veterinary epidemiology. The laboratory has a high diagnostic capacity as a result of project activities.

A total of 55 veterinary auxiliaries were trained before October 1986. Training of additional veterinary auxiliaries following the October 1986 date was terminated in compliance with USAID/Washington directives.

The project trained 20 Livestock Service field staff in preliminary epidemiological techniques. These agents have been handicapped in executing their duties due to transportation constraints. However, technicians stationed throughout Niger at the Livestock Veterinary Posts are investigating major diseases affecting camels as well as small ruminant plague, sheep and goat pox.

Only one of the five proposed mobile vaccination parks was realized during the LOP. This was due to budgetary constraints and delivery (transportation in the field) problems. As a result of the above, four of the vaccination parks cited for purchase were never ordered.

This project component has been continued under the USAID funded Agriculture Sector Development Grant (ASDG). Funding has been programmed for three years for a total of FCFA 175.124.250.

Recommendations:

This component under the ASDG should begin training of new veterinarian auxiliaries from the herder groups in epidemiological techniques as the auxiliaries trained under the original project design proved to be a very effective cadre for gathering information from pastoral zone herders, and providing veterinary treatment for their animals.

3. Natural Resource Management

The Pastoral Early Warning system developed in the Agadez, Tahoua and Maradi departments has been extended to the departments of Tillabéry, Zinder and Diffa. Dosso is considered to be an agricultural zone and has been specifically omitted. Two technicians were trained in satellite data analysis at New Mexico Stat University (NMSU) and 32 for ground truthing in Niger. The GON now has a tool to assess the biomass production in a relatively short

period of time. Updated satellite imagery is obtained on a monthly basis from AGRHYMET, and is analyzed by the project. Ground truthing teams throughout the country verify production in the pastoral zone during the growing season and monitor available forage throughout the dry season, to assist the GON in planning annual herd movement and strategies in times of drought.

This component is being continued for three years under the ASDG. Funding is programmed for FCFA 281.175.360.

Recommendations:

This component under the ASDG should continue to train Nigeriens in satellite data analysis and ground truthing. The GON should try and link the Early Warning System to other early warning systems such as FEWS in order to provide a more complete picture concerning crop and pasture bio-mass production projections.

4. National Market Information Gathering System (Formerly under the Marketing Research Component)

All programmed studies (four) related to livestock and grain marketing have been conducted. The system is installed throughout the country, in all seven departments. 110 technicians have been trained in computer use and market monitoring (47 were scheduled to be trained). Of the total 110, 60 technicians have been trained during the last eight months of the project. Market Information is collected at the arrondissement level on a monthly basis. The information is relayed to the Ministry where it is analyzed and used in formulating policy decisions. The results are retransmitted to the technical services throughout the country. The Market Information Gathering System could be much more effective if market prices were made available throughout Niger via radio/television broadcast. This short coming of the system has been recognized by the GON and a proposal has beeh submitted to the Agriculture Sector Development Grant (ASDG) that would make market information readily available to the producers traders and and consumers of Niger.

This component is being continued for three years under the ASDG. Funding is programmed for FCFA 305.310.550.

Recommendations:

This component under the ASDG should conduct an in-depth study of marketing of Nigerien origin livestock in Nigeria, Togo and any other West Africa markets.

The National Market Information Gathering System should be developed during the ASDG to include a national broadcasting program that will allow information and analyses to be relayed to the general population via radio/television on a weekly or even daily basis.

5. Human Resource Development

All activities under this component were discontinued during the redesigned phase of the project. Human health interventions in the pastoral zone have been addressed by the GON. The project, however, had very limited success in establishing functional literacy or basic health improvement programs. As a result, basic health activities originally carried out by the project such as nutrition and disease prevention training for herders were incorporated into the Rural Health Improvement Project for continuation. The main ILP project intervention in the pastoral zone occurred during the 1984/85 drought under an emergency program implemented in response to the herders affected by the drought. Blankets, cooking ustensils, medicines and food supplements were provided with project funds and courses in food preparation, prevention of dehydration and basic medicine were given until 1986 when this project component was terminated.

Recommendations:

All health activities in the pastoral zone should be managed by the Ministry of Public Health, Social Affairs and Womens Status (MPHSAWS) separately from livestock or agriculture oriented projects. Herders should have access to health programs and the MPHSAWS would benefit from projects that organized health auxiliaries in the herders groups. Private pharmacies should be encouraged in the market centers of the pastoral zone that the herders frequent.

6. Project Management Unit

The original Project Management Component envisioned under the projects first phase was modified to become the Project Management Unit under the redesigned ILP project.

The change of focus from channeling project inputs for the field (Tahoua) through the GON and USAID for all project activities to focusing on policy development and reform was a result of the elimination of many of the original project components. The redesigned project's mandate was to use project inputs to influence and implement policy reform in the Livestock Sector.

Under the redesigned project all programmed policy studies and all planned training have been conducted. The Computers Utilization Committee and the Early Warning System are operational.

The Directorate of Studies and Program (DEP) is well staffed with trained personnel who utilize the data produced by the various information gathering systems established under the project to address a broad spectrum of

issues of concern to the livestock sector. The Ministry has a Policy Coordination Committee that reviews DEP studies, analyses and recommendations and forwards this information to the Minister for his review and decision concerning policy development.

The project has trained enumerators and analysts at the central, department and arrondissement levels, and introduced computers into all seven departments. The DEP receives data from the national Marketing Information Systems, the Epidemiology Unit and the pastoral Early Warning System. Based on these data, the DEP produces studies and analyses on subjects ranging from rangeland carrying capacity and drought strategy to livestock movements and grain and livestock market prices.

As a result of the studies, current policy recommendations include: 1) deregulation of cross border trade; 2) decentralization of the livestock service operational budget to address localized drought; 3) reduced emphasis on government credit programs for producers; and 4) increased emphasis on natural resource management in the pastoral zone.

Recommendations:

The DEP in the MAR/H should continue to work on needed policy reforms. The DEP could be especially helpful in working with the Code Rural Secretariat on land reform and water point management issues in the pastoral zone.

D. Participant Training Projections

ORIGINAL PROJECT PARTICIPANT TRAINING PLAN

Under the original Project Agreement long-term training was not to go beyond the M.S. level. Long-term training was to be mostly in the U.S. in the fields of sociology, rural extension, credit management, veterinary medical specialization, economics and literacy training for a total of 29.5 person-years.

Short-term training was to be mostly in Niger in social organization, range management, human health and project administration/management for a total of 109.32 person-months or 9.11 person-years.

a. Herder Organization Development

PROJECT YEAR	1	2	3	4	5
Long-Term in U.S. (person-months)					
Pastoral Centers Coordinateur	0	12	12	0	0
Credit Managers	12	12	12	12	0
Sociologist	12	24	12	12	0
Herder Association Organizer (Counterpart)	12	12	0	0	0
Short Courses Court Terme					
In Niger	5.5	6.1	7.5	9.0	10.5
In U.S.	0	6	0	0	0

b. Animal Production Health

Training (person-months)					
Long-term in U.S. (3)	36	36	36	12	0

c. Natural Resources Management

Training (person-months)					
Short-term International	6	6	4	4	0

d. Marketing Research

Training (person-months)					
Long-term in U.S. (2)	12	24	12	0	0

PROJECT YEAR	1	2	3	4	5
Training (person-months)					
Long-Term in U.S. (Literacy)	12	12	6	0	0
Short-Term Local (Literacy)	.5	.5	.5	.5	.5
Short-Term Local (Health)	2	2.4	2.8	2.8	2.8
Short-Term in Europe (Health)	1.5	2	2	2	2
Seminar (Local - Health)	1	2	2	2	0
Seminar (France - Health)	0	1	0	1	0
Short-Term in U.S. (Seminar Physician)	1.5	1.5	0	0	0

f. Project Management

No training provided under this component.

REDESIGNED PROJECT AGREEMENT AMENDMENT PARTICIPANT TRAINING

The project training plan was modified under the redesigned project due to several factors:

a) the new project design no longer required the type (disciplines)of trained personnel identified in the original Pro.Ag training plan as the project's objectives were changed.

b) under the original project training projections, the GON could not supply candidates who could meet entry requirements for long-term university programs.

c) the GON identified a need for continued financial support for 11 veterinary doctorate candidates who lost their original financial backing. USAID provided the necessary support to allow the candidates to complete their degree requirements through reprogrammed ILP project financing and Planning, Management and Research (PM&R) project funds.

Training under the redesigned Project Agreement Amendment is as follows:

Long-Term (50 years)

1 M.S. in U.S. (2 years)
13 regional programs (26 years)
11 veterinary doctorates (22 years)

Short-Term

Short-term training was to consist of in-country, and US/Third Country workshops and on the job training to be developed by Tufts University, MAR personnel and the International Livestock Center for Africa (ILCA) upon the arrival of the technical assistance personnel. The short-term programs to be implemented by the project was to include the training of five DEP members and fourteen departmental level livestock personnel in socio-economic analysis, statistics, survey methodology, computer techniques, and livestock analysis. Seventy Nigeriens were to be trained in epidemiology, laboratory analysis, vaccine production, livestock extension and livestock economics. Two MAR/H technicians will be trained in satellite imagery interpretation and in computer modeling.

Training under the original and redesigned project training plans was to total 79.5 person years for long-term and 9.11 person years for short-term. Actual training data show a total of 77 person years programmed for long-term training. Participants either currently in training, or who have completed their training total 69 person years. Two participants were terminated for incompletion of work or failure to pass examinations and one participant is deceased.

Short-term training totaled 2.4 person years for U.S. and third country participants and approximately 9 person years of in-country seminars and workshops.

The evaluation and subsequent redesign of the project altered the original training plan considerably. While the GON had submitted few quelified candidates for either long or short term training during the original project phase, the request for funding of nine veterinarians and eleven animal and plant scientist during the redesigned phase (long-term) decreased the number of participants during the LOP substantially.

Appendix C provides a detailed analysis of participant training and PIO/Ps for the life of the project.

III. LESSONS LEARNED

This part of the report lists lessons learned from the project evaluation and from the many documents reviewed in the course of preparing this report.

A. Program/Design

-- Livestock projects, especially where they involve the institutionalization of new concepts (in ILP's case, Herder Organizations and forage reserves), are necessarily long-term in nature and must be given enough time to come to fruition, 10 years or more in most cases.

-- Be realistic when comparing the planned tasks/outputs of the project with the resources allocated. More specifically, look at similar projects in the same region for guidelines when designing a project.

-- Be specific when defining project tasks/outputs. A project-wide implementation plan should be developed that focuses on simultaneous implementation of all project components.

-- Be aware of host country limitations. This is especially true concerning the ability of the host country to supply experienced, trained personnel to the project. This also applies to the ability of the host country to supply project funding and financing recurrent costs following the PACD.

-- Realize that host country staff sent for educational programs leading to advanced degrees might not be assigned to the project when they return because they are in such high demand to staff higher level positions.

B. Implementation

-- Coordination and integration of expatriate technical assistance staff can be enhanced by designating a Chief of Party or Team Leader, early in the project and by holding regular meetings.

-- Assure that there will be adequate continuity of Contractor project management staff, especially in the early stages of implementation.

-- Sound project infrastructure is vital to efficient project operations. This includes having sound accounting/financial management procedures and an adequate inventory system (when implementation plans include large outlays for the purchase of commodities) in place at the outset of project implementation.

-- Counterpart training and the continuity of host country personnel are essential for the successful continuation of activities initiated by the project.

-- Grass-roots participation of local populations is essential to the success of livestock and range management projects. This participation includes solliciting the opinions of the community through surveys, incorporating local farming and forestry use practices into range land use planning, groupement/ cooperative activities, and model sites.

IV. ROLE OF PEACE CORPS VOLUNTEERS AND OTHER DONORS IN THE PROJECT

While Peace Corps Volunteers (PCV's) were envisioned to participate in the range management component of the project, none were ever formally assigned to the project by the Peace Corps/Niger nor the GON. This was due to opposition to the use of PCV's by the first Nigerien Project Director. When the second Nigerien Project Director was assigned to the project, the project had been re-oriented and there was no longer the need to request the placement of volunteers under project activities.

Other donors, notably the World Bank and the French donor assistance group (FAC) liaised closely with project management and USAID/Niger during all phases of the ILP project.

The Bank eventually joined in the implementation of the Pastoral Early Warning System by providing Nigerien technicians (funded by the Bank's Centre-Est project) to collect ground truthing information in the eastern part of Niger. These technicians were trained by the ILP project in ground truthing data collection and satellite imagery interpretation.

FAC adjusted its strategy concerning development in the livestock sector to conform with the ILP shift of emphasis from livestock production to policy formulation and reform.

APPENDIX A

COMMODITIES/CONSTRUCTION

A. HISTORY OF COMMODITY PROCUREMENT

The initial budget for U.S. financing from the project paper was $17.5 million; the amended budget, in the Project Paper Amendment of October 20, 1986 was $10.9 million and the final budget, in the last Project Implementation Letter (PIL number 19), was for $10.9 million. The breakdown was as follows:

	Initial Budget	Amended Budget ($US 000's)	Last PIL #19
Technical Assistance Personnel	7,736	5,028	8,330
Construction	582	87	-0-
Commodities	759	670	-0-
Training	759	673	466
Other	2,900	2,606	1,959
Contractor Overhead	2,030	1,692	-0-
Contingencies	1,274	-0-	-0-
Inflation	1,272	-0-	-0-
Construction Contingency	188	-0-	-0-
Audit/Evaluation	-0-	-0-	-0-
100	107	-0-	-0-
TOTAL:	$17,500	$10,856	$10,856

USAID funded inputs were supposed to include technical assistance, training, commodities, construction, and other direct costs, commodities were procured under the "Technical Assistance" line items, which was in the form of Procurement Implementation Order/Technical Assistance (PIO/T) with Tufts University, and under the "Other" line items, which was the local currency expenditures account.

An In-Use-Survey of project equipment/commodities was conducted in January 1989 and the following observations were noted in the report.

In order to develop an accurate and complete history of commodity procurement since the institution of ILP project activities the following documents are essential to review: Project Agreement; Amended Project Agreement; Project Paper; Amended Project Paper; Project Implementation Letter; Purchase Orders; Procurement Implementation Letter (PIO/C's for

commodities and PIO/T's for technical services), and existing inventories. The Purchase Orders and the PIO/C's were impossible to obtain for this report because they were with Tufts University in the United States. Tufts University has not submitted their final report in which the above documents should appear.

The Contractor for the ILP project, Tufts University, was responsible for all project commodity procurement outside the Republic of Niger, whether initiated from within or outside the country. This included commodities such as equipment (e.g., computers), supplies (e.g., laboratory supplies), and logistical support except vehicles (e.g., household furnishings). Of the total budget for the ILP project the Tufts University contract was 78 percent, $8.3 million. It was not possible to determine how much of this amount was spent on commodities for the project because Tufts University records were not available.

The only records available at the time of this report of commodities procured by Tufts University for the ILP project were the receiveing reports. These reports were sent to USAID/Niger by the contractor to record commodities purchased overseas. A list of commodities in the receiving reports has been obtained, but unfortunately the majority of the prices for the commodities were not listed and this made it impossible to segregate these commodities into different categories (e.g. nonexpendable or expandable). This list of commodities received could not be verified with any Tufts University records because of their unavailability.

In order to develop a history of commodities procured under the local currency expenditures, involving 18 percent of the total budget, USAID 1034 (Public Voucher for Purchases and Services Other than Personal) forms were used. The 1034 forms were submited to USAID by the project to verify expenses. The 1034 forms for the ILP project were divided into three separate accounts: 1) Project Management Unit; 2) Herders's Association Development; and 3) Emergency program.

A review and comparison was made of all applicable and available Letters of Commitment, Letters of Credit, files and accounting ledgers. Due to the unavailability of Tufts University records it cannot be determined whether commodities were bought in accordance with the USAID regulations, and if there are other responsibilities left unfinished to date.

The Host Country Government (GON) inputs, as stated in the amended Project Agreement, were only for personnel services, infrastructure and other costs (i.e., operation of GON project support facilities). The GON was not responsible for any procurement of commodities.

Since Tufts University was responsible for all commodities procured overseas, and Tufts records were not available at this time (particularly the shipping and billing instructions), the completeness of shipping

documents cannot be determined, nor whether they were shipped in accordance with the USAID shipping and buying regulations. It was stated in the Contract for Consultant Services between the Government of the Republic of Niger and Tufts University (see Article 21.1, Air Travel and Transportation) that Tufts was to ship commodities in accordance with USAID regulations. It is also impossible at this time (due to the lack of essential documents) to determine commodity arrival to date. According to the ILP Project Director, all commodities ordered have been received.

Accuracy of the ledgers was checked and there appear to be some inconsistencies. A general lack of order exists for the 1034 forms kept at USAID/Niger, and the documents are not organized to correspond clearly with project records. The project books since January 1987 have been kept very accurate and up-to-date, including an elaborate computer accounting system. However, there is a problem with "bon de commande" numbers. The "bon de commande" numbers sent in with receipts for the USAID 1034 forms are not the same numbers used in the accounting books of the project. This was noted in the USAID/Niger semi-annual recertification reports. There is no complete inventory system for the project, although an inventory system was set up for the warehouse only in Tahoua in January 1987.

VERIFICATION

A physical inventory was done for all commodities on hand that were purchased or obtained for the ILP project. The inventory is organized by location of the commodities, and the condition of the commodities is also noted.

All materials, vehicles, and equipment bought with local currency funds have been received, and the ILP Project Director reported that all commodities bought by Tufts University contract have been received.

COMMODITY USAGE AND ACHIEVEMENT OF DESIRED COMMODITIES RESULTS

In order to determine whether the commodities procured during the life of the ILP project are being utilized properly and in a timely manner, and whether the desired commodity results have been achieved, the commodities have been segregated according to commodity usages. The five different commodity usages are: A) computers and computer related commodities; B) laboratory commodities; C) wells and irrigation related commodities; D) vehicles; and E) logistical support commodities.

1. Computers and Computer Related Commodities

Computer and related computer commodities (e.g copy machines, air conditioners, software) were procured for the Policy Formulation and

Management, National Market Information Gathering System, and the Natural Resources Management components of the ILP project amended Project Agreement.

The Director of the ILP project reported that all computers and computer equipment were received in good condition, although he did mention a concern for the durability of the brand of computers procured. In the PIO/T with Tufts University amended December 23, 1986 it is stated that IBM or Apple personal computer or similar microcomputer will be procured because "these computer are of exceptional hardware quality and durability and are easy to repair," Samsung monitors and Magitronic computers were procured.

All computer facilities, except in Diffa, were inspected and appear to be utilized properly.

All computers have been installed at the Tillaberi department. This installment will be carried out under Agricultural Sector Development (ASDG).

Other commodities procured by the ILP project for the Marketing Information System were eight mobile cattle scales. These remain unassembled in the NAR warehouse. The ILP Director reported that the delay in assembling the scales was caused because the instructions were not received. Plans have been made for assembly in Niamey and distribution of the scales in the near future as soon as ASDG funds are available.

2. Laboratory Commodities

Laboratory commodities were procured for the Veterinary Epidemiology and Animal Health components of the ILP project. The following is a list of laboratory commodities projected procurement, as stated in the Project Agreement (PA) and amended Project Agreement, and actual dates of procurement.

COMMODITY	PROJECTED PROCUREMENT	ACTUAL PROCUREMENT
Laboratory equipment:		
- Tahoua satellite Laboratory	January 1984	February 1984
- Veterinary posts	July 1984	Eliminated in amended PA
- Veterinary parks ordered	January 1984	October 1984
- Procurement and construction of veterinary parks at Tofemanir , Amataltal, Tassara, and Tchin-Taborak	April 1985	Eliminated in amended PA
Design, procure and construct a satellite vet. lab. in Tahoua (funded under the NRLP)	July 1984	September 1985
Construction of dispensary at Amataltal	December 1984	Eliminated in amended PA Eliminated in amended PA

Many of these commodities (e.g. veterinary parks and dispensaries) were not procured because the project was amended and did not include these commodities in the revised plan.

According to the ILP Director all laboratory commodities were received without damage. However, procurement and shipping of laboratory commodities involved considerable delays. One possible solution to this type or problem is to obtain a waiver for American procured commodities. Most of the commodities procured were manufactured in Europe but had to be purchased in the U.S. due to USAID regulations. Time and cost of shipping could have possibly been saved if commodities that were manufactured in Europe were bought and shipped from there.

The Revco freezer in Tahoua laboratory has not been operating properly since early 1987. Parts were difficult to procure and the project has incurred large repair bills, and the freezer is still not functioning correctly. The ILP Director recommends that in the future Revco freezes not to be procured.

There were no problems reported due to lack of spare parts or laboratory supplies during the project's execution.

The majority of the procured laboratory equipment is being utilized properly and in a timely manner.

3. Wells and Canal Commodities

The procurement of wells and canals was first for the Natural Resources Management section of the Project Agreement, but was later one of the objectives of the Emergency Drought Strategy designed to bring relief and rehabilitation efforts to herder families and their livestock.

In total 39 wells were built, 34 in the Tahoua area and 5 in the Agadez area. These wells were built for small scale agriculture and watering animals. The ILP Director states that the wells are being used properly. The local authorities are in charge of repairs and general maintenance of the wells. Molds for building wells were also procured by the Project. These molds have been transferred to the local authorities in Tahoua.

Over 1,200 meters of water canals were built by the project near Maradi. The USAID RDESO/WCA engineer on a recent visit verified that the canals are being used for their intended purpose. The ILP Director states that the canals are being use properly except for those in Korohane. The pump at the Korohane canal is not working, hence the canal is not being utilized. The local authorities procured the pump, it was not procured by ILP project funds. The canals are now under local authority, and they are responsible for the upkeep and repairs of the canal. The canals were constructed at a cost of $172,650.

Other commodity procurement under the Emergency Drought Strategy included a large procurement of gardening tools, medicines and food. All these commodities, according to the ILP Director, were redistributed to herder families for relief and rehabilitation efforts. U.S. Dollars 8,180 were disbursed for the Emergency Drought Strategy.

4. Vehicles

ILP project vehicles were projected for procurement in March 1984, but were not obtained until March 1985. The main reason for this delay was that the procurement had to go though a competitive procurement process, which involved special authorization fron the Government of Niger. As stated in the Project Agreement, any local procurement or construction over 1,000,000 FCFA must be done through a competive procurement process. A possible solution to this problem would be to start the procurement process far in advance, this might have been impossible with the ILP project due to changes in the agreement.

In the Project Paper under indicative Procurement list, 44 vehicles were to be procured, but only 24 were actually procured due to the project redesign.

The vehicles proposed for procurement, as stated in the Project Paper, were Peugeots, Toyotas, and Suzukis. Vehicles actually procured were Peugeot, Toyotas, and Nissans. According to the ILP Director the Nissan vehicles have been difficult to maintain because Nissan parts are very hard to obtain. It should be recommended that Nissans not be bought for future projects unless spare parts can be assured.

Concerning the other vehicles procured there has been an overall success, and the project has maintened a very complete stock of extra parts.

The distribution of vehicles is slightly different from the proposed distrubution stated in the Project Agreement. The proposed and actual distribution are as follows:

DEPARTMENT	AMENDED PROJECT AGREEMENT	ACTUAL (JAN.89)
DEP/MAR	2 Nissan P-U 1 Toyota L-C 1 Peugeot 504	1 Nissan P-U 3 Toyota L-C 2 Toyota 504
Tahoua Residual MAR	1 Nissan Patrol 2 Nissan P-U 1 Toyota L-C 2 Toyota P-U 1 Mercedes Truck 1 Peugeot 504	5 Nissan P-U 1 Toyota L-C 1 Toyota P-U 1 Mercedes Truck To be salvaged: 1 IH Truck 1 Peugeot 504
Dept. Livestock Agadez	2 Nissan P-U	2 Nissan P-U 1 Toyota P-U
Dept. Livestock Maradi	1 Toyota P-U 1 Nissan P-U	2 Nissan P-U
Dept. Livestock Tahoua	1 Nissan P-U 1 Toyota P-U 1 Toyota L-C Salvaged: Peugeot 504 IH truck	2 Nissan P-U 1 Toyota P-U

Two new vehicles were purchased since the Project Agreement distribution plan for vehicles was drawn up, and these are included in the actual distribution. Also Tufts University donated a Peugeot 504 and a 50cc motocycle to the project. The IH truck and Peugeot 504 are to be auctioned and the proceeds will go back into the project.

5. Logistical Support Commodities

Logistical support commodities include household furnishings and office furnishings for the ILP project and the project contractors. According to the ILP Director there were no problems with the procurement of the logistical support commodities.

APPENDIX B

FINANCIAL REVIEW

The following financial review is in two parts. The information contained in the first part, concerning the accounting and financial management systems of the project, was taken from documents in the USAID/Niger Controller's Office and from project evaluation reports. The second part of the review addresses problems encountered with the technical assistance contractor for the project, Tufts University, and the resulting impact of those problems on the project.

PIO/P's are addressed under Appendix C and PIO/T's are reflected in Appendix A. PIO/C's and local procurement of commodities and construction are outlined in detail, in Appendix A.

A. ACCOUNTING/FINANCIAL MANAGEMENT SYSTEM

The project was initially plagued with inadequate accounting controls. The major faults were the lack of an inventory system for project commodities and goods and the lack of an updated filing system. These were identified early on in the project (1984) in the course of 121 (d) recertification reviews.

Recommendations given at the beginning of the project (1984) are as follows:

- Modify donor receivable journal as discussed.
- Control encumbrances by line item and total budget and start using serially numbered Bon de Commande.
- Open a disallowance journal.
- Avoid giving salary advances to employees. Accounting for travel advances and purchases on behalf of the project should be made promptly.
- Delegate some responsibilities associated with the gasoline coupons to the accountant, for example, placing order for and periodic reconciliation of quantity ordered and the allocations. Issuance of the coupons should be delegated to someone else, if practical, while the custody rests with the Deputy Director.
- Start a filing system.
- Increase physical security over petty cash and check books.

- An inventory list of non expendable property which should be updated quarterly.

- Projects credit fund should be deposited in an interest bearing account.

- Signatures of all payees must be obtained at the time of cash payment.

- An accountant should not be used for making payroll and other cash payments.

Review of Tufts University's accounting system produced the following recommendations for the contractor:

- Open an encumbrance journal for controlling the budget.

- Open a donor receivable journal for accounting for advances.

- Requests for gasoline coupons must be in writing and signed by the requestor.

- Accounting responsibility should be designated to someone with some training in accounting.

Major 121(d) recertification recommendations given at the end of the project (1988) included:

- The project should keep up its current documents filing system or if possible improve upon it.

- The project should improve upon the conduct of Donor's Accounts.

- The project should provide proofs for the differences detected in the balance of advances at the level of Management, GMP, and Emergency Program components of the project.

- Tufts University should use USAID funds as source of financing the petty cash account.

The final 121(d) recertification report also made the following conclusion.

"With the exception of the deficiencies described above, the current project financial control system was generally effective, and the project can be certified as being in accordance with the requirements of Section 121 (d) of the Foreign Assistance Act. II."

The project was never decertified, although at one point in 1985, an advance check was withheld by the Controller's Office until the first Project Director hired a certified accountant.

The accounting/financial management problems that existed throughout the life of the project (and were never adequately resolved despite being repeatedly identified) are listed below:

- Regulation of the Donor's Accounts.
- Update of the filing system to keep it current.
- Timely submission of no pay vouchers.

B. CONTRACTING AGENCY FINANCIAL REPORTING

The contracting agency, Tufts University, failed to submit a detailed budget for their projected costs and an expenditure report that was reflective of real project costs (February through December, 1988).

As a result, the Tufts supported project T.A. was terminated on September 30, 1988 instead of on December 31, 1988.

To date, the University has failed to meet its reporting requirements as cited Article 19.2.D of the Host Country Contract. This article states that the contractor "shall provide a final report with presentation of expenditures by summary budget item".

In conclusion, the contracting agency has:

- Failed to meet reporting obligations to USAID and the GON.

The result of the above actions has been that the GON was forced to use local currency funds that were programmed for other uses in order to maintain project activities through the Project Activities Completion Date (PACD) of December 31, 1988.

APPENDIX C

PROJECT NO. 683-0242: Integrated Livestock Production (Start: 8/16/83; PACD: 12/31/88)

SUMMARY TABLE

I. Participants

Long-Term	27
Short-Term	15
In-Country (ELT)	1
TOTAL	43

II. Costs (Sub-obligations)

Long-Term	$385,758.24
Short-Term	26,181
In-Country (ELT)	611.15
TOTAL	$412,550.39*

*Direct AID-funded costs only

III. Analysis by Location and Type of Training

A. U.S. Long-term

Participants 5

Costs $74,432

B. U.S. Short-Term

Participants 11 (9 non-funded)

Costs $20,648 (AID Funding)

C. Third-Country Long-Term

Participants 22

Costs $311,326.24

D. Third-Country Short-Term

Participants 4 (3 non-funded)

Costs $5,533 (AID Funding)

E. In-Country Training (ELT - ALIGU)

Participants 1

Costs $611.15

IV. Status of Training Program

A. U.S. Long-Term

Completed	4
Terminated	1
In-Process	0

B. U.S. Short-Term

Completed	11
In-Process	0

C. Third-Country Long-Term

Completed	9
Terminated	1
In-Process	11
Deceased	1

D. Third-County Short-Term

Completed	4
In-Process	0

E. In-Country Training

Completed (participant deceased)	1
In-Process	0

40.

PROJECT IMPLEMENTATION ORDERS/PARTICIPANTS - PIO/Ps

LONG-TERM TRAINING

Participants; PIO/P	Arrival training Site	English Training	Academic Program	Program Objective	Remarks
1. MAHAMANI, Ousmane 683-0242-1-50552	5/14/86	USIS-N I-4/86 AIIGU 6-9/86	U. of California/Davis Food industries 10/86-12/88	M.S.not awarded Terminated: 12/31/88	Returned 12/31/88 Program incompleted

U.S. SHORT-TERM TRAINING

1. BARKIRE, Abdoulaye 683-0242-1-30387	6/17/84	U. of Pittsburgh 6th Francophone Dev. Management Seminar	8/18/84
2. DIARIRI, Badamassi 683-0242-1-30407	8/8/84	Stanford U., Food Research Inst. Microcomputer workshop	9/17/84
3. BADOUGOU Maïdagi 4. IDI, Tahirou 683-0242-1-30557	2/7/85	Utah, Salt Lake City Int. Rangeland Dev. Sym.	2/20/85
5. ALIO, Abdoulaye 6. DIAGNE, Chimere 683-0242-1-30729	6/15/87	U. of Pittsburgh 9th Francophone Dev. Management Semina	8/12/87
7. DIALLO, Ibrahim 8. BARRE, Catherine 9. ABARCHE Amina 683-0242-1-30773	1/1/88	Plum Island Animal Disease Center, Veterinary medicine	2/15/88
10. ALI, Maman 11. ISSA, Denda 683-0242-1-30774	1/88	New Mexico State University Las Cruces, Warning Systems pastoral zone	5/88

THIRD COUNTRY LONG-TERM TRAINING

Participants; PIO/P	Arrival training Site	English Training	Academic Program	Program Objective	Remarks
1. YACOUBA, Boukary 683-0242-1-50545	10/19/86	USIS/N 11/85-6/86	Inst. agron/.vet. Hassan II, Rabat, Morocco Veterinary medicine	Dip: Doctoral Terminated 9/88	Deceased
2. BARTHE, Sahabi 683-0242-1-50546	11/1/87	USIS/N 11/85-6/86	IAB, Bouaké, Ivory Coast Plant and animal production	Dip. 3yrs EDC: 10/90	
3. TINNO, Kando 683-0242-1-50648	11/11/86		ENCR, Bambey, Senegal Animal husbandry	Dip. EDC: 12/89	
4. DAMMO, Hachimou 683-242-1-50650	11/11/86		ENCR, Bambey, Senegal Animal husbandry	Dip. EDC: 12/89	
5. BOUNDI, Harou 683-0242-1-50650	11/11/86		ENCR, Bambey, Senegal Animal husbandry	Dip. 3 yrs EDC: 12/89	
6. MAHAMANE, Gani L. 683-0242-1-50651	11/1/87		IAB, Bouaké, Ivory Coast Plant and animal production	Dip. 3 yrs EDC: 12/89	
7. BOUBACAR, Moussa Diallo 683-0242-1-50652	11/11/86		ENCR, Bambey, Senegal Animal husbandry	Dip: EDC: 12/89	
8. TAHIROU, Doulla Biga 683-0242-1-50653	11/11/86		ENCR, Bambey, Senegal Animal Husbandry	Dip: EDC: 12/89	
9. DJIBO, Mounkaïla Koba 683-0242-1-50654	11/11/86		ENCR, Bambey, Senegal Animal Husbandry	Dip: EDC: 12/89	
10. BEIDARI, Seybou 683-242-1-50655	11/11/86		ENCR, Bambey, Senegal Animal Husbandry	Dip: EDC: 12/89	
11. GARBA, Amadou Issa 683-0242-1-50656	11/87		IAB, Bouaké,Ivory Coast Plant and animal Production	Dip: 3 yrs. EDC: 10/90	

THIRD COUNTRY LONG TERM TRAINING (CONTINUED)

12. OUSSEINI, Adamou Assane 683-0242-1-50657	11/87	ENCR, Bambey, Senegal Animal Husbandry	Dip: EDC: 11/90	
13. ALLASSANE, Abdoulaye 683-0242-1-50665	10/1/86	EISMV, Dakar, Senegal Veterinary medicine	Dip. awarded 7/02/88	Doc
14. ROUA, Bello 683-0242-1-50666	10/1/86	EISMV, Dakar, Senegal Veterinary medicine	Dip. awarded 6/25/88	Doc
15. MAHAMADOU, Ibrahim 683-0242-1-50667	10/1/86	EISMV, Dakar, Senegal Veterinary medicine	Dip. awarded 7/27/88	Doc
16. SAYO, Amadou 683-0242-1-50668	10/1/86	EISMV, Dakar, Senegal Veterinary medicine	Dip. awarded 7/02/88	Doc
17. MARICHATOU, Hamani 683-0242-1-50669	10/19/86	Inst. agron/vet. Hassan II, Rabat Veterinary medicine	Dip.	Terminated 6/87
18. HAIDO, Abdoul Malick 683-242-1-50670	10/1/86	EISMV, Dakar, Senegal Veterinary medicine	Dip. awarded 7/15/88	Doc
19. CHEGOU, Laoual 683-0242-1-50674	10/1/86	EISMV, Dakar, Senegal Veterinary medicine	Dip: awarded 7/15/88	Doc
20. GADO, Abdoulahi 683-0242-1-50675	10/1/86	EISMV, Dakar, Senegal Veterinary medicine	Doctoral awarded 6/88	
21. N'GRADE, Goumeye 683-0242-1-50680	10/19/86	Inst. agro./vet. Hassan II, Rabat Morocco Veterinary medicine	Dip. Doctoral Awarded 2/28/89	
22. HASSOUMI, Garba 683-0242-1-50678	11/4/87	Institut Panafricain de Développement de l'Afrique de l'Ouest, Sahel, IPD/AOS Ouagadougou, Burkina Faso Planification Régionale et Aménagement	Dip. awarded 10/28/88	

THIRD-COUNTRY SHORT-TERM TRAINING

Participants; PIO/P	Arrival Training Site	Training Program	Program Completion	Remarks
1. GARBA, Ibrahim 683-0242-1-30340	1/8/84	Port-au-Prince, Haïti Int. conf. on agr. credit for small farmers		2/4/84
2. DENDA, Issa 684-0242-1-30556	10/84	Ouagadougou, Burkina Faso Remote Sensing		4/1/85
3. NAYOUSSA, Issia 683-0242-1-30739	9/14/87	Addis Ababa, Ethiopia Centre Intern. pour l'Elevage en Afrique Analyses de politiques d'élevage		10/9/87

U.S. LONG-TERM TRAINING, COSTS TO PROJECT FOR TRAINING INITIALLY FUNDED UNDER OTHER PROJECTS

Participants; PIO/P	English Training	Academic Program	Program Objective	Remarks
1. MAMAN, Ali 683-0242-1-30349		U. of Arizona Animal husbandry	B.S.; M.S.; completed 3/14/84	Training begun in 1978 unde PIO/P 683-0202-1-80674; PMSR continued under funding from PMSR; and completed this project.
2. ALIO, Abdoulaye 683-0242-1-30350		U. of Arizona Animal Husbandry	B.S.; M.S.; completed 3/17/84	Training begun in 1978 under PIO/T 683-0202-1-80634; continued under funding from PMSR; and completed thisproject.
3. BAGOUDOU, Maïdagi 683-0202-1-30353	ALIGU 9/12/84	U. of Arizona Range Management	B.S.; M.S.; completed 1/6/84	Training begun in 1978 under PIO/P 683-0202-1-80636; continued under funding from PMSR and completed this project
4. NOMAOU, Abdoulaye 683-0202-1-30365		U. of Missouri Rural Sociology	B.S.; M.S.; completed 5/29/85	Training begun in 1980 under PIO/P 683-202-1-90623; continued under funding from PMSR; and completed this project.

DOC:1022p
3/20/89

APPENDIX D

ILP PROJECTS DOCUMENTS TO BE RETAINED

The following list of documents are to be retained by USAID/Niger. Additional copies can be found in the Ministry of Animal Resources and Hydrology. These documents are to be retained for future monitoring and evaluation purposes, files to be destroyed or retired and for general research purposes.

Ahlers, Theodore
"Niger: Integrated Livestock Production Project: Microcomputer Recommendations"

Aronson, Dan, R.
"Toward Development for Pastoralists in Centre Niger"

Cord Louise and El Inguini, Nassirou
"Successful Strategies Among the Twareg of the Edouk-Kao Region during the 1984 Drought"

Curry, J.; Sollod, Al et al.
"Points d'Eau dans les Départements de Tahoua, Maradi et Agadez" Tufts

DeRidder, N. and Bourn D.
"Development of an Early Warning System for the NILP Project" ILCA

Holtzman, John
"Livestock Marketing in the Integrated Livestock project NRL"

Louis, S.; Wylie, B.; Boukary, B. and Sollod A.
"Magnitude of the Nutritional Constraint to Cattle Production in a Sahelian Region of Africa."

Louis, S.; Dankintafo, A.; B. Boukary, and N'Grade, G.
"Seasonal Influence on the Nutritive Value of the Rangeland in the Pastoral"

Loutan, Louis
"Les Pharmacies Villageoises dans le Department de Tahoua"

Maaliki, Angelo, B.
"Ngaynaaka: Herding According to the Wodaabe" Summary Version and Discussion Paper No. 2

Maaliki, Angelo, B.
"Réglement Intérieur des Associations Pastorales"

Makinen, M. and Ariza-Nino, Edgar
"The Market for Livestock from the Central Niger Zone NRL"

Maaliki, Angelo, B.
"Introduction to the History of the Wodaabe" Discussion Paper # 3 NRL

Mariner, Jeff
"Evidence and Significance of Rift Valley Fever in Niger" - Tufts

Mariner, Jeff
"Niger Project Herd Model"

Metzel, Jeff and Stem, Chip
"Draft Proposal for a Pastoral Center Droughts Strategy"

Metzel, Jeff and Haymond, Peter
"Crisis Monitoring Report" May - June 1985

Michel, Kathy
"Evaluation and Improvement of the Existing Rinderpest Vacine"

NILP
"Programme d'Urgence" 1984/85

Pase, Charles
"An Alternative Option for Management of Government Ranches in the NILP Project Zone"

Shaw, Peter
"Analyse Financière de l'Opération Sauvetage des Femelles du Plan d'Urgenc

Sollod, A.; Peiper R.; B., and Pace C.P.
"Development of a Successful Range Program in Central Niger"

Sollod, A.E. and Stryker, J.D.
"Monitoring and its Application to Pastoral Early Warning System" IN MONOTORING CHANGE IN LIVESTOCK SYSTEM,

Sollod, Albert
"Animal Disease Patterns in the Niger Range and Livestock Project Area of Niger's Pastoral Zone"

Stem, E. and Remillard, R.
"Decorticated Cottonseed Fields Trials"

Stem, E. and Remillard, R.
"Vitamin A Studies"

Stryker, D. and Sollod, A.
"The Search for a Pastoral Livestock Production Strategy" - Tutfts"

Tufts University
"Reorientation of the Niger Integrated Livestock Project"

Wolfang, K and Sollod, A.
"Traditional Veterinary Practice of Twareg Herders in Central Niger"

Wylie, B.; Pase, C.; Metzel, J.; Cord, L.; Stem, C.; Loutan, L.
"Early Warning System Report for ILP Project"

Wylie, Bruce and Peiper, Rex
"Estimating Aerial Herbaceaous Production on Sand Dune Annual Grasslands from Available Climatic data in the Pastoral Zone of Niger"

DeRidder, N.; and Bourn D.
"Early Warning System Report for ILP project"

Pase, C.; Wylie, B.
"Preliminary Early Warning System Report" 1987

Sollod, A; Vu thi, P.
"Drought Study Report" 1987

A. Cook; Mani; Seydou; 1988
"Niger's Livestock Export Policy"

Issa, A.; Wilie B.; Maman A.;
"New Mexico State University" with the participation of
Issa Denda and Ali Maman; 1987

Stem, C.
"Extrapolation de l'herbe sur pieds" 1987

Stem, C.
"Graines de coton décortiquées" 1987

Stem, C.
"Neutralisation contre les virus capripox" 1987

Dr. Stem; 1987
"Rapport du séjour au Niger"

Pase C.; Wylie B.;
" Proposition pour la continuation du systeme d'alerte précoce" 1987

Van den Ende, M.; Mariner, J.;
"Introduction au Labocel de nouvelles techniques de productions de vaccin contre la peste bovine" 1987

Stem, C.;
"Fièvre de la vallée du rift" 1987

Van den Ende, M.; Mariner J.;
"Rapport final du Conseiller en Epidémiologie et Reproduction" 1987

Pase, C.;
"Aperçu des techniques pour l'estimation de la production herbacée" 1987

Stem, C.;
"La supplémentation avec la vitamine a des bovins débilités" 1987

Stem, C.;
"Concepts de santé animale chez les éleveurs Twaregs" 1987.

Original Project Paper

Amended Project Paper

Original Project Authorization

Amended Project Authorization

Original Project Grant Agreement

First Amendment to Project Grant Agreement

Second Amendment to Project Grant Agreement

Project Implementation Letters Nos 1-19

Original Letter of Commitment

First Amendment to Letter of Commitment

Second Amendment to Letter of Commitment

Original Tufts/GON Contract

Amended Tufts/GON Contract

All PIO/Ps as listed in Appendix C - Participant Training

All copies of PIO/Cs retained by Tufts University

Original PIO/T for Tufts University

Amended PIO/T for Tufts University

End-Use-Survey for Project Commodities/Services

APPENDIX E

ECHNICAL ASSISTANCE INPUTS

All technical assistance (T.A.) personnel under the ILP project were urnished by Tufts University or one of its subcontracts. A total of twelve ong-term T.A. were programmed in the original project design. There were ineteen short-term personnel. This number was reduced to three long-term nder the redesigned effort. The long-term T.A. supplied under the latter ere:

REDESIGNED PROJECT YEARS

	1	2	3
T.A. Chief-Of-Party and Policy Advisor,	12	12	12*
Veterinary Epidemiologist,	8	12	12
Market Research Specialist.	8	12	8

hort-term personnel under the redesigned project were:

Range Management Specialist,	4	4	5
Satellite Imagery Specialist,	2	1	2
Vaccine Development Veterinarian.	4	3	3

Over the life of the project, T.A. accounted for a total expenditure of .S.$8,433,566 of the total project budget of U.S. $10,959,832. This represents a 2 percent expenditure of project funds for T.A.. It must be noted however, that 11 of the in-country and offshore procurement of commodities was included in the .A. line-item as well as U.S. training.

Person-months

The original programmed technical assistance is outlined below:

LONG TERM TECHNICAL ASSISTANCE

	1	2	3	4	5
Animal Production Specialist	12	12	12	12	0
Epidemiologist/Reproduction Specialist	12	12	12	12	0
Financial Specialist	12	12	2	2	0
Rural Sociologist	12	12	12	12	0
Pastoral Organisation Specialist	12	12	12	12	0
Livestock Economist (50% Livestock; 50% Marketing)	12	12	12	12	0
Herder Association Organizer	9	12	3	0	0
Range Management Specialist	12	12	12	12	0
Senior Physician	12	12	12	0	0
Chief-Of-Party	12	12	12	12	12
Deputy Chief-Of-Party	12	12	12	12	12
Research Assistant	12	12	12	0	0
*Campus Administrator	12	12	12	6	6
*Administrative Assistant	6	6	6	6	6
*Secretaries/Librarian	24	24	24	24	12

SHORT-TERM TECHNICAL ASSISTANCE

Virologist	0.5	0	0.5	0.5	0
Experimental Design Specialist	1	0	0.5	0.5	0
Research Interns	0	3	3	3	0

Credit Consultant	1	1	1	1	0
Social Statistician	1.5	0	0	0	0
Women-In-Development Intern	5	2	0	0	0
Econometrician	1.5	0	0	0	0
Data/Information Specialist	1.5	0	0	0	0
Computer Programmer	8	2	2	2	0
Research Interns	0	12	12	0	0
Ecologist	3	3	3	3	0
Remote/Sensing Specialist	2	1	1	0	0
Range Management Consultant	2	2	1	1	0
Public Health Specialist	2	2	2	1	0
Nutrition Consultant	1.5	1.5	1	0	0
Field Study Interns (Medical)	0	3	3	3	0
Literacy Consultant	3	0	0	0	0
Senior Economist	1	1	1	1	0
Information Specialist	1	0	0	0	0

*These positions represent the 15.5 person-years of administrative and support staff. Other positions, including an Institutional Consultant, represents 17.2 person-years of Project management furnished to the project by the university contractor.

The technical assistance team supplied by Tufts was very competent and even though initially prevented from contracting inhabitants of the project zone by the first Project Director, the team accomplished the majority of start up activities for the project. These activities were altered with the event of the 1984 drought, project audit/evaluation and redesign.

The above changes and the T.A. teams willingness and ability to adapt and conform to the changes reflects the professional and individual demeanor of the team members.

Due to a shortage of project funding, the Chief-Of-Party, Epidemiological Veterinarian and Market Research Specialist positions were terminated on September 30, 1988 instead of on the scheduled PACD of December 31, 1988. The Veterinarian and short-term range management advisors (2) who stayed on the project after September 1988, were funded with GON local currency monies as was the Market Specialist position through November 30, 1988.

TECHNICAL ASSISTANCE PROVIDED

Document Type	Document Number	Commitment Date	Person Months	Name	Amount Commiteed ($)
PIO/T	30313	01/84	114	TUFTS UNIVERSITY	8,259,276.10
PIL	19	10/88	2	N M S U	27,297.00
PIL	19	10/88	2	ANDREW COOK	14,054.00
PIL	19	10/88	2	V. DEN ENDEN	15,972.00
PIL	19	10/88	2	J. MARINER	13,631.00
PIO/T	30463	10/85	6	PRAGMA (EVALUATION)	103,336.00
TOTAL:			128		8,433.566.10