

DECENTRALIZATION, SERVICE PROVISION,
AND USER INVOLVEMENT: A PROCESS TO IDENTIFY
LOCAL-LEVEL OPTIONS IN THE SAHEL

Prepared for:

The Club du Sahel

Prepared by:

James T. Thomson, Ph.D.
Senior Associate, ARD, Inc.
P.O. Box 1397
Burlington, VT 05402 USA
FAX: (802) 658-4247

Michael Griffon
CIRAD
42, rue Scheffer
75116 Paris, France
FAX: (1) 47.55.15.30

Date: 13 October 1989

CONTENTS

ABBREVIATIONS AND ACRONYMS	i
1.0 INTRODUCTION	1
2.0 THE PROBLEM	3
2.1 Theoretical Overview	3
2.2 Practical Considerations	6
3.0 STARTING THE PROCESS: TWO EXPLORATORY APPLIED RESEARCH ACTIVITIES	9
3.1 Decentralized Provision of Public Services	9
3.1.1 Short-term Exploratory Mission to Mali or Niger in Early 1990	10
3.1.2 Assembling Existing Data	12
3.1.3 Designing Applied Research on Public Services Provision in the Sahel	12
3.2 Renewable Natural Resources Management	13
3.2.1 Case Studies of Renewable Resource Management	13
3.2.2 Data Base for Common Pool Resources	15
3.2.3 Bibliography and Information Sharing	16
4.0 PURSUING THE PROCESS: ROLE(S) OF CLUB DU SAHEL CILSS, AND OTHERS	19
4.1 Long-term Applied Research and Action	19
4.2 Conference	21
4.3 Summary	22
APPENDIXES	
- Appendix A: Summary Time Budgets	
- Appendix B: Budget for Activities	
- Appendix C: Activities: Projected Timing of Implementation	

1.0 INTRODUCTION

In contemporary West African Sahel states (CILSS countries), several major problems have attracted the attention of rural people, state officials, and funding agency staffs. These problems are:

- public finance, administrative, legal, and political systems characterized by excessive centralization, great inflexibility, and low productivity in terms of service provision;
- inadequate management of the renewable natural resources which form the basis of Sahelian rural (and thus urban) production systems; and
- agricultural policies that discourage farmer entrepreneurship.

Many other serious problems exist in Sahelian countries which are often linked directly or indirectly to these three. However, these three seem to be of highest priority in rural and urban areas menaced by environmental degradation, rapidly increasing populations, and breakdowns in production systems. ARD proposes to examine relationships among the three themes within a framework emphasizing the advantages of decentralized approaches to resolving many aspects of these problems.

This proposal envisages a series of activities that link applied research, consultation, and action in an iterative process. Preliminary investigations will concentrate on gathering information leading to recommendations for both applied research and actions in an ongoing process of consultation with Sahelian governments. After discussion of these recommendations by concerned parties, modifications (as necessary), and concurrence, a program of action and ongoing applied research will be finalized and initiated.

The proposal contains four sections, including this introduction. The second section states the problem in greater detail. The third outlines, for funding by the Club du Sahel, two distinct packages of exploratory applied research activities and associated bibliographic work. The first set of activities is designed to help identify ways to decentralize provision of public services in the Sahel. The discussion focuses on problems in delegating political and public finance authority to local jurisdictions. The second set of activities focuses more on issues involved in decentralizing management of Sahelian renewable natural resources. These activities are separate, but sufficiently interlinked that they should be undertaken as two

elements of a general investigation. The brief concluding section sums up the major elements of the proposal and outlines the role of the Club du Sahel and other organizations in these activities.

2.0 THE PROBLEM¹

This section provides a theoretical overview of the problems involved in providing public services such as road maintenance and management of renewable natural resources. It then reviews practical considerations that Sahelian states must address if they are to improve the ability of their citizens to provide themselves with certain local goods and services. Success in this area will permit citizens to collaborate more effectively with public servants in the provision and production of other goods and services.

2.1 Theoretical Overview

Theories derived from institutional analysis and design, institutional economics, and the new political economy permit analysis of a number of key problems in the contemporary francophone Sahel. These theories and models of decision making derive from research and analyses undertaken by, among others, scholars in the United States working in the areas of public choice, social choice, and institutional analysis. These theories provide powerful tools to analyze problems encountered in the provision of public services; for instance, in road maintenance and management of renewable natural resources such as forests, irrigation systems and pastures, sanitary water supplies, and waste removal. Analysis will focus on enabling local communities to develop diverse sets of institutions for dealing with these problems. Solutions will include reform and innovation in public institutions as well as privatization where appropriate.

Public service provision and resource management systems must be:

- designed to produce certain services and products. (If they are taken over as going systems, they must often be redesigned to meet desired objectives);
- the designs must be constructed, (i.e., physically created), or in the case of renewable resources, converted (or modified) into ongoing resource systems;

1 This section draws heavily on, and in large part quotes directly from, Elinor Ostrom, Larry Schroeder, and Susan Wynne, "Institutional Incentives and Rural Infrastructure," [Draft, especially Chapters 3 and 4], a State of the Art Paper prepared under the Decentralization: Finance and Management Project.

- they must then be operated;
- maintained; and
- units of the services or managed resources must generally be used, i.e., distributed to appropriators.

Public service and resource management issues, in the Sahel, as elsewhere, are influenced by various factors, including land tenure systems; judicial institutions; information circuits; research and training; resource mobilization (public and private financing mechanisms); and the technical nature of services (waste disposal, preventive medicine, road maintenance) and production systems, e.g., rainfed agriculture (mixed farming), irrigated agriculture, stock raising, and agroforestry; and exchange systems.

Public service provision and resource management activities cannot be dealt with in isolation from the surrounding institutional context. Any study of contemporary Sahelian local, rural, and urban communities must take into account the incentives that influence the decisions and behavior of service consumers and resource users (urbanites and rural people—principally farmers, herders, and wood cutters). Factors that generate incentives and disincentives include:

- the nature of the goods and services that local communities are trying to provide, e.g., management of renewable natural resources, potable water supply, health, education, and extension;
- the character of specific local communities involved in producing such goods and services in a particular time and place, including the economic system(s) within which community members organize production; and
- the rules—formal and "working"—that structure human behavior in local settings, and which also structure the behavior of administrators, public servants, expatriate and local technical assistants, and elected officials at all levels concerning management of renewable resources.

The combination of these factors, at different stages in the provision of public services, and the management of renewable natural resources (i.e., design of service provision and renewable resource systems, production, operation, use, and maintenance), together with the perceived self-interest of the actors involved, influence individuals to choose particular types of strategies in pursuing their interests. The interactions that

result when individuals, groups, and jurisdictions put these strategies into action, produce outcomes. Outcomes can be evaluated in terms of efficient or inefficient production of services and management of resources, equity or inequity of distribution of services, and resources.

Analysis of service provision and renewable natural resource management issues will focus on certain problems, each giving rise to specific types of costs. These costs, if not dealt with adequately by appropriate counteracting institutions, can escalate to the point where service production or resource management are simply not feasible for service consumers or resource users. Such problems must be resolved if service provision is to be sustainable, and if resource management is to become an attractive (paying) proposition for resource users. These problems are found in many service and resource management schemes, particularly those that deal with service outputs and renewable natural resources having the characteristics of common pool resources or public goods.

Such costs can be classified in four categories:

- production costs;
- coordination costs;
- information costs; and
- strategic costs.

Production costs are those incurred by the process of transforming inputs into outputs using a particular technology and scale of operation.

Coordination costs include two sub-types: direct transaction costs and breakdown costs. The first occur during the process of negotiating a common (coordinated) program of action to produce a service or a going renewable resource management system. Among these are costs of negotiating, monitoring, and enforcing agreements which actors make. The second type of coordination costs arise when systems break down and fail to provide the expected flow of goods or services.

Information costs are of two sorts. Time and place information costs occur through failure to obtain accurate information about time and place factors of a given local human and ecological environment. When such information is lacking, typically because of an overly technocratic approach to design, local service provision and resource management systems are often designed (or modified) without reference to critical local factors. Systems poorly designed for lack of indispensable time and place information tend to function poorly.

However, lack of adequate scientific or technical knowledge leads to other types of problems because systems (e.g., road maintenance systems, soil erosion control structures, and irrigation diversion works) do not function at feasible efficiency levels, break down repeatedly, or simply collapse.

Strategic costs, finally, are those that arise when counteracting institutions are not devised to deal with problems of adverse selection, shirking, free-riding, and corruption. Adverse selection occurs when those who have more information than others (that is, asymmetrical information) use it to their advantage in selecting strategies that benefit them at the expense of other actors involved. Shirking occurs when some of those participating in a joint effort do not carry their fair share of the burden. This results again from asymmetrical information, i.e., the shirker knows his/her own condition and how much effort he/she can furnish, while others lack that information. Free-riding occurs when those who benefit from a flow of goods or services generated by a service production system or by a renewable resource cannot be excluded from enjoying those benefits. Then they strategically withhold resources necessary to manage the resource in order to maximize their own gains. Corruption occurs when transaction costs rise because officials (or others) strategically withhold services until illegal rewards are offered.

2.2 Practical Considerations

In most Sahelian states, rural and urban local jurisdictions capable of producing the range of public services necessary to support economic and political development do not currently exist. Organizations capable of managing maintenance of local farm to market roads, creating and applying land-use management regulations—including enforcement of land-tenure rules and resolution of land-tenure dispute, operating and maintaining common pool resources (such as woodstocks, pastures, wells, and water courses located on village lands), supplying potable water and urban sanitation services on a regular and reliable basis, and providing health and educational services at local levels, are relatively rare.

Exceptions to this generalization clearly exist.⁴ Numerous private voluntary organizations operate at local levels in many Sahelian areas (e.g., 6S in Burkina Faso) and increasingly in Senegal, Mali, and Niger.

Several factors explain the low level of public organization in most Sahelian communities. First, the transaction costs—the time, energy, and money—involved in getting official authorization for nongovernmental organizations (NGOs) discourages rural people from seeking formal status for their organizations. Lack of formal status limits the ability of NGOs to engage in long-term activities, gain access to credit, and enjoy other advantages of corporate status.

Second, few local-level units enjoy the attributes of autonomous jurisdictions. Local-level units ("communautés locales"), as defined here, include sedentary quarters, villages and cantons, pastoral camps and fractions, and small, urban communities. Officials of all these units are expected to function in support of field agents of national government ministries. They provide initial conflict resolution services and assist the Ministry of Finance in collecting taxes locally for the national, regional (région, département), and county (cercle, arrondissement) jurisdictions. Local special purpose jurisdictions, such as pasture, Woodstock, micro-watershed, or irrigated perimeter management committees, would also fall within the definition of local-level units as defined here. Regional and county jurisdictions are referred to in this proposal as "intermediate" jurisdictions.

Few of the local units have any formally recognized rule-making powers. However, officials of most of them are responsible for applying rules concerning peace and order, control over stock movements, and national taxation, for purposes of collecting national or "local" taxes, fees, or charges.

Few have any formally recognized authority to make, apply, and adjudicate their own rules, e.g., concerning land-use management, management of specific resources, land tenure, or maintenance of infrastructure located within the jurisdiction. Few have any autonomous taxation powers. These legal disabilities to exercise fundamental powers of governance—rule making, application and adjudication, taxation, levying fees, contracting out for provision of public services—may not greatly inhibit the

2 See James T. Thomson, Alfred Waldstein, Sheldon Cellar, and Jerry Miner, "Options for Promoting User-Based Governance of Sahelian Renewable Natural Resources," report prepared for presentation at the CILSS-sponsored "Regional Encounter for a Better Socioecological Balance in the Rural Sahel," Segou, Mali, May 22-27, 1989.

capacity of local jurisdictions and NGOs to start activities within their competence and capacity to finance from their own resources. However, typically, these efforts are not sustainable. The legal disabilities on public jurisdictional organization at the local level (village, canton, or special district) have a cumulative effect on local capacity, willingness, and efforts to provide public services critical to improvement of the quality of life in local units. These restrictions unnecessarily discourage local initiative and promote dependency on non-local sources of political authority and financial resources, which often are not forthcoming.

Remedying these problems involves a willingness to address issues such as:

- empowering local jurisdictions to make operational rules governing provision of services and management of renewable resources, including tenure rules governing access to land, water, and other renewable resources such as trees, pastures, and fisheries;
- empowering local jurisdictions to develop and enforce rules to remedy violations of operational rules;
- empowering local jurisdictions to tax in order to achieve locally defined purposes;
- maintaining or developing processes of conflict resolution which parties to disputes accept as impartial, efficient, and equitable; and
- addressing the complicated problems involved in supporting local institutions without making them dependent on outside decision makers.

The following two sections describe a process designed to address these complicated questions. Section 3.0 presents a detailed proposal for two initial applied research activities. Section 4.0 outlines the process. The process involves applied research; iterative consultation on policy changes among representatives of the Club, CILSS, CILSS countries, financing agencies, local, national, and international PVOs; and training. Section 4.0 also describes the roles of the Club and CILSS in guiding these activities.

3.0 STARTING THE PROCESS: TWO EXPLORATORY APPLIED RESEARCH ACTIVITIES

This section outlines two different sets of exploratory research activities, which should be undertaken as preliminary steps in developing an action, applied research, and monitoring program. The first concentrates on issues relevant to decentralized provision of public services, generally in rural and urban communities, including, but not limited to, management of renewable natural resources. The second set of activities focuses on issues directly involved in permitting and encouraging rural Sahelians to take greater effective responsibility for managing local renewable natural resources.

In the Sahel, provision of public services and management of renewable natural resources share certain common characteristics. They also diverge on other points. For that reason, this document proposes two parallel research efforts that are organized separately but move forward in tandem and mutually reinforce each other.

3.1 Decentralized Provision of Public Services

This section proposes an applied research and bibliographic program that will involve three components:

- a short, exploratory mission in either Mali or Niger, under Club du Sahel auspices, to assess the current state in one country, of formal regulation and effective practice concerning institutions for providing public finance of local public services;
- a simultaneous review of the literature (review of published materials and documents, and collaboration with other researchers) to assemble existing data on institutional and public finance aspects of providing local public services in francophone Sahelian countries; and
- preparation of recommendations based on examining existing arrangements for field activities and applied research to develop and test strategies to change government policies and implement new, decentralized approaches to public service provision.

The proposed exploratory action and research program, while short-term in the initial phase, is long-term in nature. Earlier investigations concerning public finance aspects of service provision, carried out in Upper Volta/Burkina Faso, are

suggestive in this regard. That research, implemented under the auspices of the USAID-financed Local Revenue Administration Project by researchers associated with Syracuse University, demonstrated that acquiring data on actual revenues and expenditures, and administrative situations and performance in a local jurisdiction, can be a time-consuming process. An initial exploratory mission can define the parameters and precise goals of subsequent work, as well as establish a general picture of the existing situation. However, long-term follow-on work will have to be envisaged if the effort is to make a real contribution to improving public service provision systems in the Sahel. An iterative process that weaves applied research, action, and consultation among donors and CILSS governments, through the Club/CILSS framework, will be indispensable.

3.1.1 Short-term Exploratory Mission to Mali or Niger in Early 1990

A three-person team will spend four weeks in one of these two countries in early 1990. The team will have two goals. The first will be to collect information on formal legislation and administrative regulations regarding:

- the legal ability of local-level institutions (villages, cantons, camps, fractions, arrondissements, and cercles) to provide various public services, including, e.g., land use, natural resources management, land tenure, road maintenance, health and education; and
- the legal authority of those units to mobilize and expend resources to provide public services.

The second goal will be to begin determining the effective practices of local institutions that relate to provision of public services and to financing (or participating in financing) provision of public services at the local level. The Ministry of the Interior should probably sponsor the activity, so that officials at the arrondissement or cercle level will have an incentive to cooperate actively in achieving mission goals. Full liaison must be maintained with other relevant technical ministries.

The team will first spend two weeks in the national capital. A major part of this period will be devoted to examining, collecting, and copying relevant documents. To the extent possible, team members will also conduct interviews with officials in the Ministries of Interior, Finance, Agriculture and Environment, Public Works, and possibly Health and Primary Education. Interviews will be held with representatives of other relevant organizations (e.g., donor organizations) and in Niger with the Rural Code Committee.

Much of the formal material concerning local institutions and public finance arrangements will be available in the Journal Officiel. Information on public finance matters will be obtained from the Ministry of Finance. These data will particularly concern the powers and responsibilities of intermediate jurisdictions (arrondissements, cercles, and communes), and local jurisdictions (canton, villages, fractions, camps, and special districts) in the event they enjoy any formal fiscal authority. It may be possible to obtain fiscal data at the central level on several arrondissements or cercles. Initially, of greatest importance here will be figures on national and "local" taxes, fees, charges, rents, and fines either collected by or allocated to these intermediate jurisdictions, and on allocation of funds by source and expenditure category, expending agency, and final destination. Careful distinctions will be made here between the budgets of intermediate jurisdictions and those of field agencies of national ministries which operate in such jurisdictions.

Additional materials may be obtained from the Ecole National d'Administration, and from line ministries as well as from other contacts which the team may develop during the course of interviews.

The team will spend the second two weeks in the field, visiting a total of three (3) arrondissements or cercles and two (2) local urban jurisdictions of less than 100,000 residents.³ The arrondissements or cercles will be selected in different parts of the country on the basis of geographic (environmental) situations, ethnic composition, and economic characteristics.

The purpose of these field interviews will be to:

- determine what information, and what quality of information, is available at the level of intermediate jurisdictions (e.g., the degree to which tax rolls are current), and the character of official reports on revenue collection and expenditure levels; and
- interview knowledgeable individuals about their understanding of the authorized responsibilities and powers of their local jurisdictions to provide and produce public services, and in light of relevant rules, their perceptions of the transaction costs of initiating activities (revenue collection, public

³ At a later point in the process, applied research on service provision issues in larger urban centers may become appropriate. Because of the short duration of the initial trip, it is advisable at this stage to focus on smaller, more easily understood urban areas.

service expenditures on construction projects, service operations and maintenance, service provision activities, and promulgation of natural resource and land-use management rules).

Team members will have one week prior to departure to review relevant literature, including materials produced on these issues for upper Volta/Burkina Faso by Syracuse University under the local Revenue Mobilization Project, and to develop a draft research instrument. After the four-week mission, they will have two weeks to write up their findings. Findings will be submitted to the supervising organizations (ARD/IU/SU/CIRAD) by March 31, 1990. The supervising organizations will present team findings to the Club of the Sahel and the Donor Advisory Group as soon thereafter as reasonable.

Total time required for this activity: 7 person weeks x 3 consultants = 21 person weeks.

3.1.2 Assembling Existing Data

During January and February 1990, research assistants will assemble bibliographic materials on issues relating to Sahelian local institutions for public service provision, including information on village land and renewable natural resources management. Researchers will also collect existing documentation relevant to local public finance issues (resource mobilization and expenditure) in the Sahel.

A total of twenty (20) days of research assistant time will be devoted to this activity.

3.1.3 Designing Applied Research on Public Services Provision in the Sahel

In late spring 1990, the supervising organizations will prepare action recommendations and applied research designs for follow-on work on the above issues, to be initiated during 1990. An action agenda should include propositions for experimentation with approaches to providing public services desired by local communities. Applied research will focus on a combination of service provision issues, including management of renewable natural resources, and on the institutional and public finance problems which underlie these issues. Both action and applied research propositions will be discussed at a workshop involving Club, CILSS, donor and country representatives, as well as members of the organizations supervising field and applied research activities. When, with Sahelian participation, an agenda has been established and training needs defined, the next phase of the process will be initiated with separate funding.

Total time required for this activity = three (3) person weeks of core (SU, CIRAD, IU, ARD) staff time.

3.2 Renewable Natural Resources Management

This section outlines two applied research activities designed to promote, in Sahelian countries, decentralized approaches to managing renewable natural resource, plus related bibliographic work.

3.2.1 Case Studies of Renewable Resource Management

Case studies will be used to test theories about the organization and financing of renewable natural resource management, with the goal of improving the capacity of rural Sahelians to manage their renewable resource bases. Initial investigations of the selected cases will focus on existing patterns of resource use, with special attention to controls on access and exploitation. The theories will be used to identify specific problems in the management of natural resources. Ongoing activities (indigenous management systems, projects, NGO operations, completed case studies) in the resource management sector will be taken as "natural experiments" to be analyzed using the theoretical tools cited above in Section 2.1. These case studies will be approached using a holistic framework; that is, renewable natural resource systems will be defined to include farming systems and the natural resources associated with them.

If the outcomes in any particular situation are judged to be inadequate by local people, it should be possible to discuss explanations for such outcomes with them, and with others involved in managing renewable natural resources. The case analyses will be used first to identify critical problems hindering expansion of existing, indigenous management efforts, or problems which discourage users from managing resources, or from developing better management practices. In a second stage, recommendations for institutional and public finance measures to strengthen existing management practices and encourage new efforts will be developed from the case analyses.

Working with resource users and government officials, team members will devise modifications in existing institutional frameworks to create incentives that either recognize and reinforce use-initiated efforts to manage renewable resources, or to encourage relevant actors to better manage resources. These modifications can then be tested in pilot situations. Simultaneously, the case studies can be used as supporting material in policy dialogue discussions with funding agency staff members and CILSS country officials.

In early 1990, a three-person team consisting of a farming systems specialist, a specialist in renewable resources, or a geographer familiar with Sahelian conditions, and an institutional specialist with a background in law will undertake a six-week mission. Prior to departure, the group will develop, through bibliographic work (see below) and contacts with practitioners and scholars, a list of (at most) twelve field operations to visit. A subset of these operations may be selected as case studies for longer-term monitoring under a subsequent applied research activity.

The focus of this rapid appraisal of field operations will be first, to identify, in a cursory manner, the technical bases of the farming systems (crops and agriculture) and natural resource systems (woodstocks, watershed, and fisheries, where appropriate). Second, the team will record the roles that various actors (farmers and resource users, government officials at various levels, NGOs, and private-sector organizations) are formally required or authorized to play. Third, the team will report, within the time constraints of a rapid rural appraisal, activities and opportunities for intervention by the same set of actors.

Implications of field investigations for institutional reforms will be explored. These findings will be organized along lines compatible with the work being done by the IU Workshop on common pool resources (see below). Parallels with the findings of the Sahel Futures Study and the Segou Rencontre will also be developed. The renewable natural resources team will also exchange findings with the public service provision team. Each will be free to use data collected by the other.

Recommendations for ongoing applied research and eventual training efforts will be developed as part of the report prepared by the team on these activities. Recommendations will highlight the opportunities for collaboration and exchange among already existing activities. Research efforts will build on existing activities wherever possible. In addition to pursuing the case studies, an important part of such follow-on activities should be applied research on public finance issues involved in the management of Sahelian renewable resources. This research should focus on:

- conceptualization and measurement of the full range of management and operation costs of particular resources in specific time and place settings (private and collective costs of management and operation, as functions of property rights, benefit areas, and management and operation strategies);

- identifying the strategies potentially available to concerned communities through which resources may be mobilized;
- identifying the strategies actually adopted;
- where relevant, testing alternative approaches to mobilization of money, labor, and materials involved in resource management; and
- expenditure strategies and problems.

3.2.2 Data Base for Common Pool Resources

Part of the problem involved in developing recommendations for intuitive and policy reforms which strengthen existing user efforts to manage renewable resources is that case studies are often difficult to compare. Using a framework of public and social choice theory and practical tests, an effort to address this problem is underway at Indiana University's Workshop in Political Theory and Policy Analysis. A working group there has developed a relational data base to facilitate analysis of renewable resource questions.

The types of changes in existing rule and economic systems that may be identified in case studies (see above) are likely to have counterparts in similar situations elsewhere in the Sahel, in Africa, and in other developing countries. For this reason, results of case studies will be added, where appropriate, to the common pool resources data base.

This relational data base has been designed to integrate the sort of information outlined in Section 2.1 above. It can be used to compare different types of common pool resource cases. The data base will allow testing of hypotheses about numerous issues that will be critical to the success or failure over the next decade of efforts to transfer control over and responsibility for resource management from Sahelian state agencies to resource users. For instance, it will be possible to examine the probable consequences of different types of rules governing access to and use of renewable resources. It will also be possible to test, against existing data, the probabilities of success of various types of interventions to promote greater user control over renewable resources, greater power sharing between state technicians and users as well as among users, and to specify, in considerable detail, the most common causes of failure in resource management, and the most appropriate ways to build on existing local capabilities in renewable resource management. When used in an iterative manner, this analytic tool can help monitor evolution of resource management efforts, isolate causes for failure or inadequacy in this area, and develop propositions for solution.

The data base, which already contains approximately 100 non-Sahelian irrigation cases and 30 fishery cases, could be used immediately as a framework to integrate resource management cases concerning these issues in the Sahel. The generic resource coding instrument developed for use with the data base will have to be adapted to deal with forest, pasture, soil, and wildlife resources.

The IU Workshop is prepared to clone the data base and make it available for use by other institutions. However, for this to happen in the Sahelian context, two conditions must be met. First, coders must learn the political-economic theory which underlies the data base in order to properly code cases. Second, to make the data base and its analytic power readily available to francophone users, particularly Sahelians, the coding forms and categories must be translated into French.

A two-day meeting should be scheduled in Paris in March or April 1990, during which Professor Elinor Ostrom and James Thomson will present to a group of interested French scholars the common pool resources data base under development at Indiana University.

Field team time: three persons for a total of nine (9) weeks each, including one (1) week of preparation, six (6) weeks of fieldwork, and two (2) weeks of write-up.

IU and ARD core staff time required for the initial activity in Paris to explain the common pool resource data base: four (4) person days x 2 = eight (8) person days. A Bloomington, Indiana/Paris round trip airfare for Ostrom, a Washington, DC/Paris round trip airfare for Thomson, and four days of Paris per diem will also be required.

ARD core staff time to adapt the generic common pool resource framework of the data base to Sahelian resources: ten (10) days.

3.2.3 Bibliography and Information Sharing

Bibliographic activities will be indispensable. While a substantial bibliography exists on renewable resource management issues in France and the United States, and to a lesser extent in Sahel, exchange of information and planning of joint, collaborative, or coordinated research efforts should be envisaged. Extensive work has been undertaken, and a solid bibliography of common pool resource materials built up by the Indiana University Workshop. Many of the core topics (nature of goods and services, character of local societies and production

systems, techniques of institutional analysis) dealt with by American public choice, institutional economics, and new political economy scholars have been addressed as well by French, other European, and Sahelian scholars. It will be important to develop a bibliography of these disparate materials, so that they can be made more widely available to interested scholars and practitioners.

A bibliography of French-language sources dealing with renewable natural resources management, particularly in the Sahel, should be assembled. Bibliographies for discrete collections may exist already, e.g., the ORSTOM and CIRAD collections, and French academic institutions.

A total of (twenty) 20 days of research assistant time will be devoted to this activity.

4.0 PURSuing THE PROCESS: ROLE(S) OF THE CLUB DU SAHEL, CILSS, AND OTHERS

The results of the first two exploratory missions and associated bibliographic studies will be completed by late March 1990. The implications of these studies for further work will be incorporated, as just noted, in a set of recommendations to be prepared during April 1990 by the supervisory organizations, and assisted if possible by two Sahelian representatives.

The proposal outlining next steps in the process will be presented to a small group of representatives of concerned Sahelian countries, CILSS, the Club, the donors, and concerned experts. The proposal will detail four different activities:

- applied research, action, and monitoring in natural resources management;
- applied research, action, and monitoring in provision of local public services;
- training for Sahelians and others in both areas; and
- a major conference of 75 individuals drawn from the five participating groups (CILSS countries, CILSS, the Club, donors, and concerned experts).

4.1 Long-term Applied Research and Action

It would be premature at this stage to specify the focus of long-term applied research in either provision of local public services or natural resources management. However, the local public services provision activity will deal with service provision in both urban and rural areas. Areas of inquiry will include at least the following:

- identification of the types of services (infrastructure development and maintenance, resource management, health, education) preferred by populations in rural and urban areas, including modifications desired in existing service patterns;
- institutional innovations, including recognition of the authority of local jurisdictions to operate as service provision units, that will permit service users to more easily articulate their preferences for variable packages of services;
- institutional innovations appropriate to enable service users to co-produce some services;

- public finance mechanisms appropriate to support the costs of desired services, including both intergovernmental transfers and transfer of authority to small local jurisdictions to mobilize resources for service provision;
- strengthening or development of methods and institutions for conflict resolution designed to ensure that all parties in a service provision unit have access to adequate grievance mechanisms.

The natural resources applied research work will focus on testing approaches to resource management in rural areas. Topics will include (at a minimum):

- identifying, with natural resource users, their preferences for resource management strategies that begin from the context of existing production systems;
- obtaining authorization for real shifts of control over resources from state officials to users;
- officially recognizing and strengthening existing indigenous resource management units, and supporting the natural resource management activities of private voluntary organizations;
- developing resource governance units, including special districts (where appropriate) capable of involving resource users as resource managers;
- developing resource (labor, materials, and money) mobilization mechanisms that can provide for sustainable management over the long term; and
- developing conflict resolution mechanisms capable of resolving the inevitable disputes among resource users.

The two parallel applied research activities will be exchanging information regularly, particularly on institutional design and public finance issues. They will also be action-oriented. Each will seek authorization, with the backing of the CILSS, Club, donors, and Sahelian host-country governments, for pilot activities. These activities will permit practical testing and monitoring of interim research results and, over the midterm, will become action research sites within which resource and service users play an increasing role in developing solutions to their own service delivery and natural resource management problems.

Training for Sahelians, and also for a small number of individuals from donor countries, will be indispensable if the results of applied research and associated policy dialogue are to be transformed over the next decade into accepted practice in the Sahel. Training candidates should be either mid-career persons with solid academic background, practical experience, and demonstrated interest in the issues addressed in this proposal, or recent graduates with background and qualifications enabling them to contribute in this area.

An adequate training program should envisage preparation of at least twenty (20) individuals over the coming five years. Training will be organized by the supervising organizations—principally, Indiana and Syracuse Universities and CIRAD.

4.2 Conference

A conference of approximately 75 persons⁴ will be organized during early 1991. It will have a twofold purpose: to report on initial results of applied research activities and provide a forum for debate about those results, and to plan and discuss next steps in the ongoing process.

4 Assumptions about participants:

- Sahelian country representatives (including producer representatives, along lines pioneered at the Segour Rencontre): 9 countries x 3 representatives/country = 27;
- CILSS representatives = 5 ;
- Club du Sahel representatives = 5 ;
- Donor organizations: 10 organizations x 2 representatives/organization = 10;
- Private voluntary organization representatives: 10 PVOs x 1 representative/PVO = 10;
- Experts commissioned to prepare thematic papers = 5 ;
- Field researchers reporting on applied work under these service and resource management decentralization initiatives = 5 ;
- m Conference support staff (secretaries, logistics specialists, organizers) = 8.

4.3 Summary

This proposal has identified a set of issues that are inherent in any attempt to strengthen decentralized provision of public services and renewable natural resources management in the Sahel. These issues focus, in large part, on a series of problems involved in creating local jurisdictions and allowing and assisting them to produce various public services, as well as encouraging greater user responsibility for management of the Ashless renewable natural resources, along lines proposed at the recent Segou "Rencontre". The proposal then outlined two preliminary sets of associated action, applied research, and bibliographic activities. One of these sets focuses on exploring ways to enhance Sahelian capacity to promote decentralized provision of public services. The other addresses similar problems concerning decentralized management of renewable natural resources.

Should the Club decide to fund the proposed exploratory applied research activities, Club staff will need to contact Sahelian governments, particularly Niger and Mali, to discuss their interest in participating in this program, and to arrange clearances for the initial work in early 1990.

A significant program promoting decentralized provision of public services and resources management in the Sahel will eventually require a long-term commitment by Club member countries and CILSS states. It will be necessary to continue to support Sahelians and expatriates in their efforts to develop a better understanding of the constraints to be overcome, as well as the opportunities inherent in various decentralized approaches to provision of public services and resources management in the contemporary, changing Sahel. Training should also be envisaged as part of any long-term program supported by Club member countries.

APPENDIXES

Appendix A: Summary of Time Budgets

Note 1: These budgets cover all projected labor and material needs under Activities 1 - 3.

The budget for Activity 4, Process Guidance Group Meeting, covers only the labor inputs from experts, plus secretarial and editorial support for that group. It is assumed that the participation of the Club, CILSS, and donor organization representatives will be funded from other sources.

Note 2: The summary budgets presented for Activity 5, Long-term Action/Applied Research, and Activity 6, Training, do not include provision for supervisory or support personnel, office space, etc.

1. Local Public Service Provision in CILSS Countries:

- o Exploratory mission to Niger or Mali: seven person weeks x 3 consultants:

twenty-one (21) person weeks

- o Bibliographic work on public service provision in Sahelian countries by research assistants:

twenty (20) days

- o Home office support:

five (3) days

- o Secretarial and editorial:

ten (10) days

2. Local Renewable Natural Resources Management in CILSS Countries:

- o Exploratory mission: three persons for a total of nine (9) weeks each, including one (1) week of preparation, six (6) weeks of fieldwork and two (2) weeks of write-up:

27 person weeks

- o IU and ARD core staff time required for the initial activity in Paris to explain the common pool resource data base:
eight (8) person days
- o ARD core staff time to adapt the generic common pool resource framework of the data base to Sahelian resources:
ten (10) days
- o Bibliographic work on natural resources management in Sahelian countries by research assistants:
twenty (20) days
- o Home office support:
five (3) days
- o Secretarial and editorial:
ten (10) days

3. Action/Applied Research Planning Workshop

Applied research designs for decentralized provision of public services and natural resources management in CILSS countries:

- o Supervisory organization (SU, CIRAD, IU, ARD) staff time for travel and workshop:
twenty-one (21) person days
- o Supervisory organization staff time for workshop preparation and results write-up:
nine (9) person days
- o Secretarial and editorial:
ten (10) days

4. Process Guidance Group Meeting (Paris)

Evaluation, modification and finalization of action/applied research recommendations; selection of process guidance committee:

- o Experts in public service provision, public finance, institutional analysis and design, resources management, including personnel from supervisory organizations for travel and meeting:

twenty-four (24) person days

- o Supervisory organization staff for workshop preparation and write-up:

sixteen (16) days

- o Secretarial and editorial:

five (5) days

5. Long-term Action/Applied Research in CILSS Countries

(Illustrative)

- o Experts:

eight (8) person years

- o Sahelian researchers:

sixteen (16) person days

6. Training (U.S. and France)

- o Mid-career and recent graduate:

twenty (20) person years

Appendix B: Budget for Activities

Note 1: Activity 5, Long-term Action/Applied Research, and Activity 6, Training, will be financed separately. The budgets presented for these activities are merely summary estimates, and in the case of Activity 5 do not include, e.g., funding for both in-house and field technical and support personnel, office space, etc.

Note 2: No budgetary projections are presented here for the proposed 1991 conference on "next steps", nor are funding mechanisms for the conference discussed in this proposal.

Note 3: If the proposed Long-term Action/Applied Research, Training, and Conference are approved, the supervisory organizations (ARD, SU, IU, CIRAD) will prepare detailed budgets for these activities.

1. Local Provision of Public Services in CILSS Countries

Public Finance Economist @ \$400 x 40	=	\$16,000
Institutional Analyst @ \$400 x 40	=	16,000
Rural Sociologist @ \$400 x 40	=	16,000
Air travel \$3,000 x 3	=	9,000
Ground transportation in Sahel--car	=	3,000
Per diem 30 x 3 x \$100	=	9,000
Home office professional support @ \$540 x 3 days	=	1,620
Secretarial and editorial @ \$215 x 10 days	=	2,150
Report translation 115 pp	=	4,250
Report production and distribution (100 copies x \$7.00 plus shipping)	=	1,250
Computer and peripherals	=	5,000
Other direct costs (visas, medical, communications, supplies, etc.)	=	1,500
Bibliographic work and copying	=	3,000
Indirect Costs on non labor line items	=	10,800
Activity 1 Total	=	\$98,570

2. Local Natural Resources Management in CILSS Countries

Institutional Specialist @ \$600 x 62 (includes 10 days to adapt data base to Sahelian conditions)	=	37,200
Farming Systems Expert @ \$500 x 52	=	30,160
Geographer @ \$400 x 52	=	20,800
Air travel \$3,500 x 3	=	10,500
Ground transportation in Sahel-car	=	4,000
Per diem 42 days x 3 x \$100	=	12,600
Institutional specialists @ \$600 x 8 days (data base demonstration)	=	4,800
Per diem 4 days x 2 x \$159	=	1,272
Home office professional support @ \$540 x 3 days	=	1,620
Secretarial and editorial @ \$215 x 10 days	=	2,150
Report translation	=	4,250
Report production and distribution (100 copies x \$7.00 plus shipping)	=	1,250
Computer and peripherals	=	5,000
Other direct costs visas, medical, communications, supplies, etc.)	=	1,500
Bibliographic work and copying	=	3,000
Indirect Costs on non labor line items	=	13,000
Activity 2 Total	=	\$153,102

3. Action/Applied Research Planning Workshop
(Bloomington, Indiana)

Experts in public finance, public service provision, institutions, resources management @ \$600 x 30 (21 days for travel and meeting, 9 days of preparation and write-up)	=	\$18,000
Airfare § \$1,500 x 2 + \$750 x 2	=	4,500
Per diem 3 x 4 x \$71	=	852
Secretarial and editorial § \$215 x 10	=	2,150
Report translation 50 pp	=	2,000
Report production and distribution (100 copies @ \$100 plus shipping)	=	600
Indirect Costs on non labor line items	=	2,385
Activity 3 Total	=	\$30,487

4. Process Guidance Group Meeting (Paris)

Experts in public finance, public service provision, institutions, resources management @ \$600 x 40 (24 days for travel and meeting, 16 days of preparation and write-up)	=	\$24,000
Airfare @ \$1,500 x 4	=	6,000
Per diem 3 x 4 x \$159	=	1,908
Secretarial and editorial @ \$215 x 5	=	1,075
Indirect costs on non labor line items	=	2,370
Activity 4 Total	=	\$35,353
Subtotal Activities 1 - 4	=	\$317,512

5. Long-term Action/Applied Research in CILSS Countries

(Illustrative only)

Assumptions: experts receive annual salaries of \$65,000; housing, post differential, storage and shipping of personal effects, R&R in Paris, round-trip airfare for two.

Public Finance Economist @ \$200,000/year x two years	= \$400,000
Institutional Specialist @ \$200,000/year x two years	= 400,000
Rural Sociologist @ \$200,000/year x two years	= 400,000
Land Use Management Specialist @ \$200,000/year x two years	= 400,000
Sahelian expert in public administration x 2 @ \$25,000 x two years	= 100,000
Sahelian Rural Sociologists x 2 @ \$25,000 x two years	= 100,000
Sahelian Natural Resources Management Specialists x 2 @ \$25,000 x two years	= 100,000
Sahelian Jurist x 1 @ \$25,000 x two years	= 50,000
Sahelian Geographer 1 @ \$25,000 x two years	= 50,000
Full computer package and peripherals @ \$5,000 x 8	= 40,000
Vehicles @ \$25,000 x 4	= 100,000
Indirect Costs on non labor charges	= 42,000
Activity 5 Estimated Total	= \$2,182,000

6. Training (U.S. and France)

4 students per year plus
families & \$3 0,000/year/family
x 5 years = \$600,000

Activity 6 Total = \$600,000

Subtotal for Activities 5 - 6 = \$2,782,000

APPENDIX C

Activities: Projected Timing of implementation

1990

JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
NR	ARD/CIRAD (MALI OR NIGER)							NR APPLIED RESEARCH & ACTION			
	NR	BIB(CIRAD/IU) (PARIS/BLGMTN)						LPS APPLIED RESEARCH (& ACTION ?)			
	LPS	(MALI OR NIGER)									
	LPS	BIB (CIRAD/SU/IU) (PARIS/SYRACUSE/BLGMTN)									
		APPLIED RESEARCH/ ACTION/CONF. PLANNING BLGMTN (GIRAD/CILSS/IU/SU/ARD)			CLUB, CILSS REPS SAHEL, DONORS REPS SUPERVISORY ORGS (PARIS/SAHEL)						
1991	NR APPLIED RESEARCH & ACTION CONTINUES										
		MAJOR CONF (75) TO PLAN NEXT STEPS (PARIS OR SAHEL)									
	LPS APPLIED RESEARCH & ACTION CONTINUES										

- ARD = ASSOCIATES IN RURAL DEVELOPMENT, INC.
- CIRAD = CENTRE DE COOPERATION INTERNATIONALE EN RECHERCHE AGRONOMIQUE POUR LE DEVELOPMENT
- CILSS = PERMANENT INTERSTATE COMMITTEE FOR THE FIGHT AGAINST THE DROUGHT IN THE SAHEL
- IU = INDIANA UNIVERSITY
- SU = SYRACUSE UNIVERSITY
- LPS = LOCAL PUBLIC SERVICE TEAMS
- NR = NATURAL RESOURCES MANAGEMENT TEAMS