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ANALYSIS OF SERVICE DELIVERY SYSTEMS TO FARMERS AND VILLAGE ASSOCIATIONS IN THE ZONE OF THE OFFICE DE LA HAUTE VALLEE DU NIGER

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EXECUTIVE SUMMARY

This section summarizes the major observations and conclusions of this study. The presentation is organized following the main headings of the study Terms of Reference.

Technology Assessment[1]

The need to respond to the development demands of rural households in two relatively distinct agro-ecological zones poses a major challenge for the OHVN. Within each of these zones, farm households pursue different economic strategies to maintain and improve their standard of living. Farmers base these strategies upon both their own (indigenous) knowledge and more formal information received from agricultural development and research agencies and projects, and from other non-local sources.

This report describes five household economic portfolios that capture the principal sets of agricultural production, storage and processing, and other income-generating technologies used at the household level throughout the zone. Each portfolio description includes the significant non-agricultural and income-generating activities and identifies the household use of several indigenous food and cash crops.

The idea of a household portfolio, as described in this report, could be productively used by the OHVN to define a more effective and successful extension program. The portfolio concept could help the OHVN and other agencies to incorporate local knowledge in designing and refining their technical packages. The concept is also a means for the OHVN and other agencies to adapt their technical packages more closely to farmers' constraints and opportunities.

Technical Services Needs[2]

Some type of decentralized program planning may be the most effective means for the OHVN to respond to the services required by farm households now, and over the next 5 to 10 years. The current OHVN technical package does not respond to the variability in farmers' conditions found throughout the zone. In some areas the package contains serious inconsistencies.

Farmers do not look primarily to OHVN field agents or to IER research staff for new information. They tend to rely on their own local sources of information and channels of communication. Nor does it appear that either research staff or OHVN extension specialists account for farmer knowledge in the identification of research and extension themes. There is little evidence of research results finding their way into OHVN technical recommendations. Nevertheless, the possibilities for developing several "non-traditional" cash crops, especially for farm households in the northern sectors, deserves serious consideration.

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[1]Summary of TOR questions 1.a,b,and c.

[2]Summary of TOR questions 1.d,e, and f; and, 2.a and c., and 4.b

Organizations and Their Contributions[3]

T&V. The effectiveness of the OHVN T&V approach will depend largely upon the ability of OHVN agents to establish truly collaborative relationships with farmers and farmer groups. The program needs to be reoriented to create ways for farmers to become more centrally involved in research and extension activities.

Credit. The availability of agricultural equipment, supplies and credit may be among one of the most significant contributions of the OHVN for most farmers, except women. Some management improvements could help to improve the effectiveness of this OHVN-supported program.

Marketing. OHVN management, field staff and farmers recognize that the lack of control over cotton and tobacco marketing makes it difficult for the OHVN to serve farmers as effectively or cheaply as other ODRs, such as the CMDT. Sesame could offer some new possibilities for farmers in the northern sectors, if the OHVN could find an assured market outlet.

CLUSA. The success of CLUSA's training and support, and its continued contribution, highlights the importance of literacy and numeracy skills for successful village-based development activities. The CLUSA training program confronts two of the same fundamental challenges which the OHVN faces: how to work effectively in the northern sectors; and, how to respond to the widespread needs of women for cooperative management training.

Functional Literacy. The OHVN promotes functional literacy as a pivotal element in its program. By 1992 it had sponsored the establishment of over 500 village literacy centers. Nevertheless, reviewers for several years have identified two major weaknesses in the program: the absence of large numbers of neo-literates in the villages; and, the lack of sufficient reading material. In addition, literacy and numeracy training for women continues to lag significantly behind that for men. These problems, and others, suggests that the OHVN must begin to pay more attention to the functional literacy program.

Roads. The roads constructed under contract with the Brigade Pistes have enhanced villagers' access to social services and economic opportunities outside the villages. These roads have also opened the villages to increased trade and development activities. The OHVN has not, however, been able to formulate and implement an effective roads maintenance program.

Other Affiliated Programs. Several affiliated programs, such as the FAO Seed Multiplication Program, Agrométéo, Peace Corps and the DED Agroecology Program complement the OHVN extension program. Villagers appreciate some of the different services available from these programs even though their use of the services, as in the case of the FAO Seed Multiplication Project, might differ from the project objectives.

NGOs. There are approximately 20 to 30 non-governmental organizations active throughout the OHVN zone, but neither the government nor the NGO coordinating office maintains accurate records. The NGOs pride themselves on their responsiveness to villager interests and their capacity to deliver services to villagers more effectively than

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[3]Summary of TOR questions 1.e., 2.b., 3.a. and b., 4.c. and d.

government agencies. Most NGO programs are popular among villagers, but it is not clear that these programs do more than deliver a predetermined set of services. The delivery capacity of some NGOs has also been less than effective. Finally, the credit from several NGO programs often weakens the capacity of villagers to meet their debt obligations.

Other Projects. The principal issue raised by these other projects, involves the additional and attractive credit which they make available to villagers.

Organizational Dynamics[4]

The establishment of over 250 associations villageoises and village groupements represents one of the most significant contributions in the last ten years to village development throughout the OHVN zone. During this period, however, no AVs have "graduated" into officially recognized cooperatives, or tons villageois.

Animateurs play a key role in the OHVN approach to the AVS. Mixed and conflicting interpretations of the position of the animateurs, however, raises questions about the viability of their role in the AVs. The Schéma Directeur presents several measures that could be used to strengthen the AVs.

The OHVN presents its proposed contract plan as a means to achieve a more secure and clearly identified level of financial autonomy and flexibility with the government. Through a contract plan the OHVN seeks approval as a more commercially-based public establishment.

The status of the OHVN as an EPA weakens its potential to deliver rural development services throughout the zone. The results of a recent financial analysis, however, suggest that until the OHVN is in a less tenuous financial position, a preferred approach might involve some type of compromise relationship with the government.

The OHVN may be the most important development actor throughout the zone, but it is by no means alone. Villagers confront a veritable cafeteria of development opportunities. The multiplicity of organizations creates the risk of overloading villagers with too much credit and tends to overburden the already overcharged animateurs. The government administration, including both the territorial administration and those ministries with special projects, the OHVN, the NGOs and donor agencies clearly need to find ways to establish a basis for more coherent and popular development programming.

Political and Institutional Context.[5]

The Etats Généraux may signal the beginning of a new era in Malian politics and development. The Etats help to chart a new rural agenda for the country. In the absence of specific steps to deal with concrete problems, however, the populist rhetoric may become more important than real change in the countryside. Both SYCOV and a revitalized and more broadly-based Chamber of Agriculture could become key representatives for Malian villagers.

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[4]Summary of TOR questions 4.a and e.; 5. d.; 6. a. and b.

[5]Summary of TOR question 5.

The Schéma Directeur is a useful, strategic planning document which the OHVN and donors could profitably use to define more effective development activities to get agriculture moving in the OHVN zone. The Schéma explicitly recognizes the need to look at rural development in the context of the links between agriculture and industry. The Schéma also seeks to get beyond the rhetoric of "diséngagement." The document presents a reasoned approach to identifying the shared responsibilities of government, the private sector and the rural population in order to make development programs work.

ACKNOWLEDGEMENTS

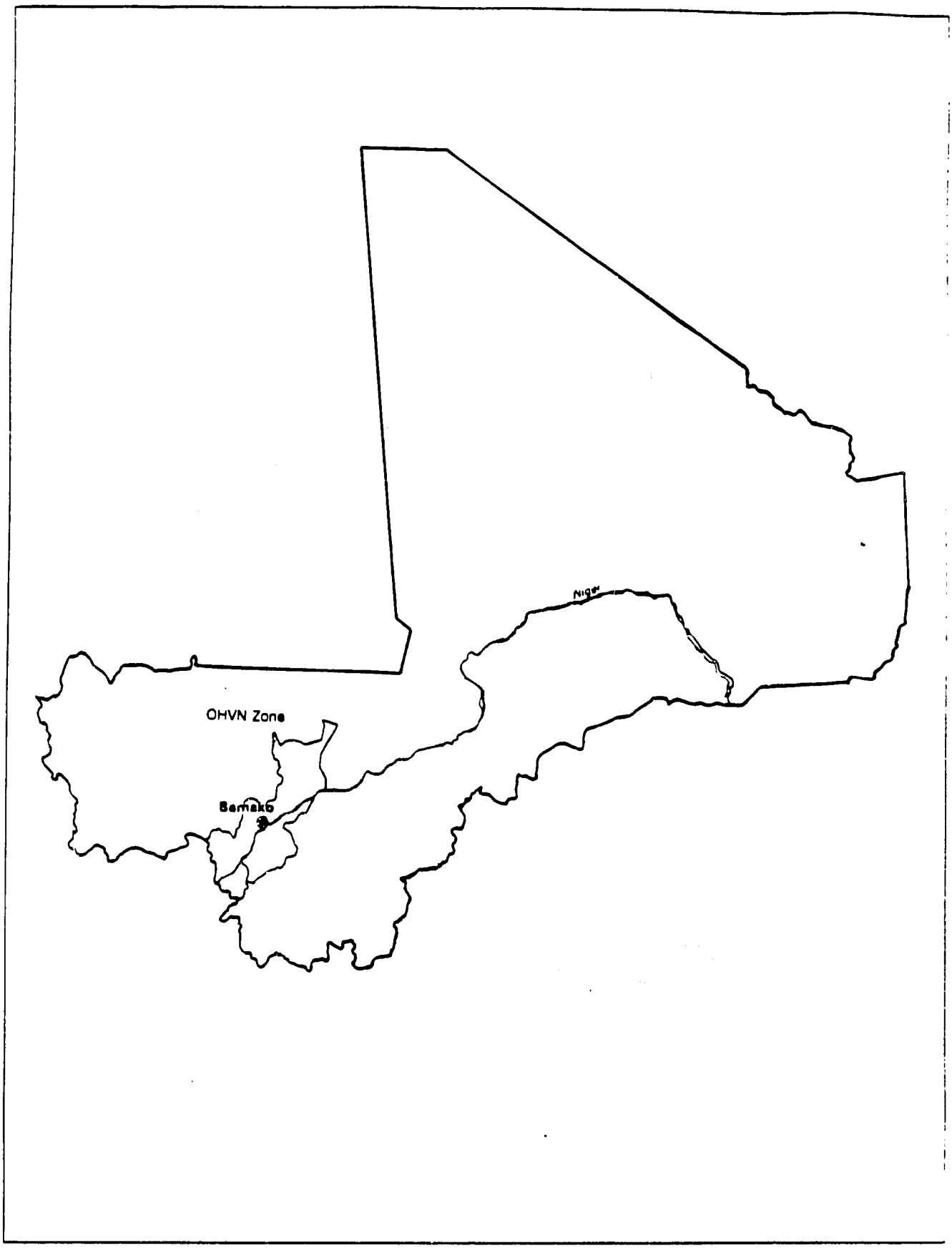
We would like to thank all of those who gave so graciously and freely of their time in order to help us carry out this analysis of service delivery systems in the zone of the OHVN.

We hope that our conclusions faithfully represent our findings and that the options can be thoughtfully considered and applied, as appropriate and by the relevant actors, to help promote rural development in Mali.

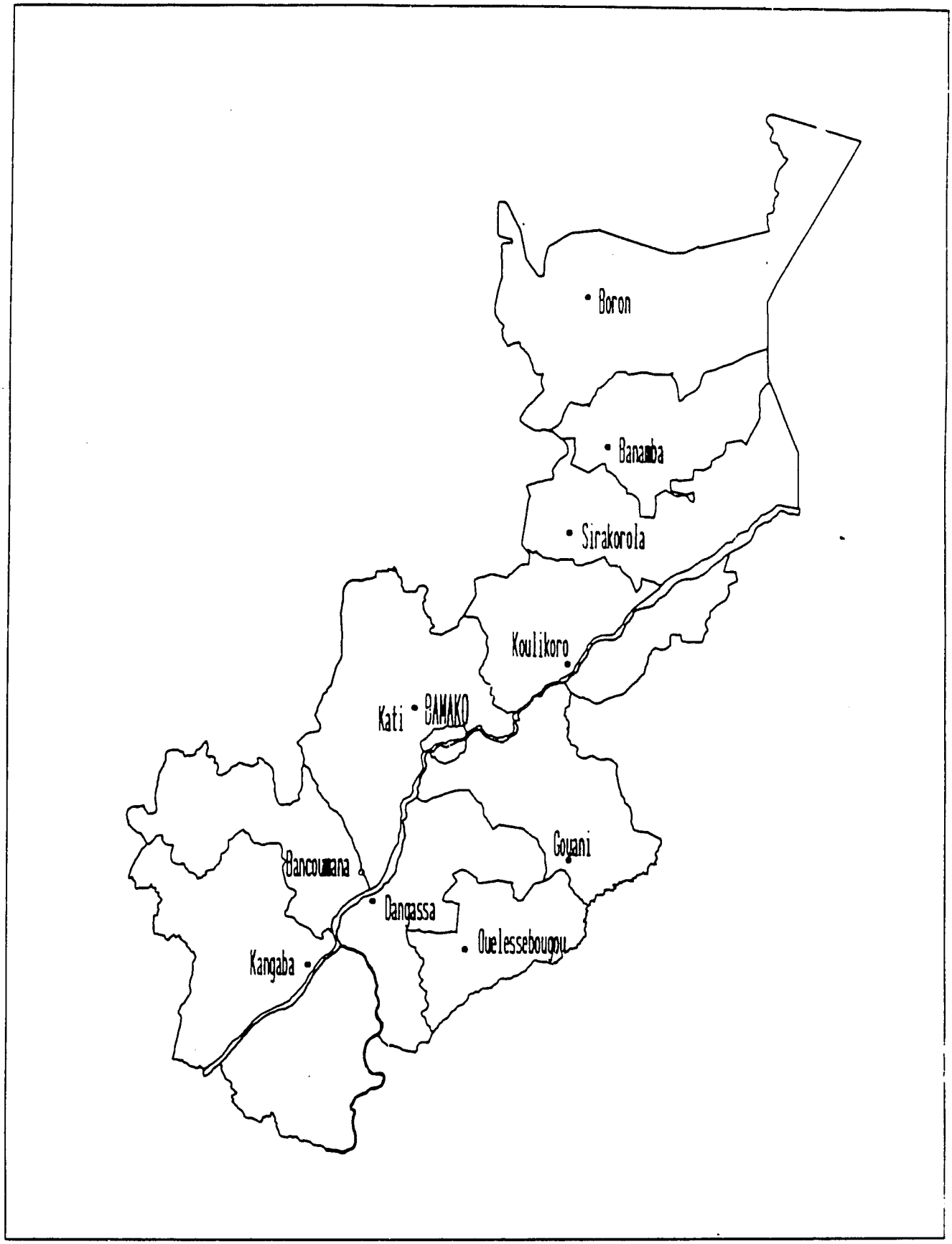
COMMONLY USED ACRONYMNS

Africare	Amélioration de la Vie Rurale en Afrique
BIT/ILO	Bureau International du Travail/International Labor Organization
CAC	Centre d'Animation Cooperative
CAR	Centre d'Animation Rurale
CECI	Centre Canadien d'Etudes pour le Développement International
CFAR	Centre de Formation des Animatrices Rurales
CLD	Comité Local de Développement
CLUSA	Ligue des Coopératives des Etats-Unis d'Amérique/Cooperative League of the United States of America (NCBA)
DNAFLA	Direction Nationale de l'Alphabétisation et de la Linguistique Appliquée
GANS	Groups Action Nord-Sud
JAC	Jeunesse Agricole Catholique
OHV	Opération Haute Vallée
USAID	Agence Américaine pour le Développement International/U.S. Agency for International Development
GTz	Coopération Technique (Allemagne)

MAP 1.
Location of the Office de la Haute Vallée du Niger



MAP 2.
Office de la Haute Vallée du Niger



I. INTRODUCTION

For over 13 years, USAID/Mali has financed the Office de la Haute Vallée du Niger (OHVN), and two other governmental agencies, the National Functional Literacy Office (DNAFLA) and the Rural Roads Office (Travaux Neufs), to carry out a wide range of agricultural and rural development programs.

Consistent with the government's objectives to transfer more responsibility for rural development to villagers, USAID financial and technical support has focused on efforts to establish self-managing village associations. A growing number of village groups have the capability to manage commercial credit and to contract directly for a variety of agricultural services, including agricultural input supply, transport and marketing.

At this stage in the evolution of the government's development policy, critically important questions arise concerning the most appropriate policies and measures to forge and sustain productive partnerships between government services, non-governmental programs, private enterprises and the villagers. As the Schéma Directeur du Secteur Développement Rural states: "Malgré des acquis indéniables, le partage des tâches entre l'Etat, le Secteur Privé et le Monde Paysan reste une question fondamentale du débat politique et de la réflexion sur l'avenir du Secteur Développement Rural."

Study Objectives (See Appendix A)

This study was designed in response to USAID/Mali's interest in understanding how to respond to the needs of different kinds of farmers and farmers' organizations. USAID/Mali has also been interested in how to assure the institutional sustainability of these organizations and that of outside service agencies.

The objectives of this study are to:

- assess the performance, in terms of the quality of services provided to farmers, of the various agencies and organizations working the OHVN zone;
- identify the range of options available to the GRM and USAID for assisting farmers in the OHVN zone, presenting the advantages and disadvantages of each option;
- describe the conditions that would enable farmers and/or village associations to pursue their production, marketing and other economic activities in a fashion that is more independent of a rural development organization, such as the OHVN, and;
- determine under what conditions private sector actors could play a greater role in agricultural extension.

In order to achieve these objectives, the Terms of Reference for this review of agencies and organizations working in the OHVN zone identified a series of questions dealing with: agricultural technology and the technical services needs of farmers; the development contribution of organizations, their dynamics and constraints; and the political and institutional context for development in the OHVN zone.

Study Approach (See Appendix B)[6]

This study was carried out in four phases from June through November 1992.

During a pre-fieldwork phase in early June, the investigators reviewed available published and unpublished documents and secondary materials related to agricultural development policy and programs in Mali and the Haute Vallée zone. With a view to using participatory-action research methods, the investigators drafted preliminary survey and data collection instruments.

In late June and early July, the investigators completed initial reconnaissance fieldwork. During this phase, the investigators sought: to identify and confirm the principal research issues; to identify an appropriate data collection strategy; and, to prepare the required research instruments. In addition to reviewing documents, the investigators carried-out semi-structured interviews with farmers groups in 11 villages throughout the OHVN zone and with representatives from a variety of development organizations and services.

Two investigators carried-out the following activities during the July to September fieldwork phase of this study (see Appendix F, Maps 1-5):

an 11 village assessment of agricultural technology and technical services needs;

the administration of a questionnaire to OHVN field agents;

the preparation of a performance ranking of CLUSA-supported Associations Villageoises and five in-depth case studies of CLUSA-supported AVs;

structured, in-depth interviews with 10 Associations Villageoises in the OHVN zone and 3 AVs in the CMDT zone, and

the preparation of an NGO location and activity map.

Based on the preliminary results of this research, the investigators presented some of the major issues for discussion during a November 1992 seminar attended by representatives from the OHVN, several government agencies and selected farmer groups.

Organization of the Report

In addition to this Introduction, this report consists of five chapters. Chapter II describes the principal production systems and economic activities in the OHVN zone. This chapter focuses on the importance of indigenous knowledge and the technical needs of farmers. Chapter III identifies the principal OHVN activities and other organizations and their contribution to development in the OHVN zone. Following this discussion, Chapter IV examines the organizational dynamics of the Associations Villageoises and the OHVN. This chapter gives special attention to the capacity of the AVs to manage a range of development activities and to the effect of the restructuring of the OHVN. Chapter V reviews the Etats Généraux and the Schéma Directeur du Secteur Développement Rural. These recent policy documents help to define the political and institutional context which affects future planning for the OHVN, the AVs and other groups. Chapter VI presents the summary conclusions and observations.

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[6] The study was carried out by Dr. R. James Bingen, Associate Professor, Department of Resource Development, Michigan State University; Adama Berthé, President of AMRAD and former Director of DNAFLA; and, Brent Simpson, PhD student in Resource Development at MSU.

II. TECHNOLOGY ASSESSMENT and TECHNICAL SERVICE NEEDS ANALYSIS

The OHVN seeks to respond to the development needs of rural households in two relatively distinct agro-ecological areas: the semi-arid north, where the annual rainfall of less than 600 mm severely limits the range of agricultural activities, and the south, where rainfall exceeds 800 mm each year. Within this broad north-south division, farm families pursue various economic strategies based on an assessment of their major constraints and investment opportunities. Throughout the OHVN zone, different combinations of microclimatic, marketing and non-agricultural factors largely define the opportunities from which farm families can choose. In selecting among these opportunities, farmers draw upon both their own knowledge and more formal information received from extension, research or other non-local sources.

The idea of a portfolio is used in this chapter as a way to identify distinct groups or sets of farm-level decisions involving these opportunities. This chapter suggests that the idea of a portfolio might guide the design of more effective development projects and programs that respond to the agricultural diversity and potential found within the OHVN zone (see the Schema Directeur du Secteur Développement Rural).

The idea of a household economic portfolio draws upon a conception of household decision-makers as investors who allocate their scarce human, financial and physical resources according to perceived short- and long-term, low and high risks. Like those who play the stock market in industrialized societies, rural producers constantly scan the investment horizon to identify the best ways of protecting and improving their standard of living. Based on this view, this chapter suggests that more appropriate and successful development activities, which are consistent with the major types of management strategies used by farm families within the OHVN, can be identified.

As used in this chapter, the portfolio concept is meant to complement other concepts, such as recommendation domains used by the IER. In contrast to this concept, the idea of a household portfolio highlights the role of both indigenous and formal knowledge in the selection of a wide variety of economic strategies at the household level.

In summary, a household economic portfolio is seen as a concept that can improve program design and thereby enable development activities to be more responsive to the dynamic and varied patterns of rural household strategies found in the OHVN zone.

Household Economic Portfolios

The Far North Portfolio

Throughout the southern portion of the Boron Secteur and the northern half of the Banamba Secteur, low and highly variable annual rainfall (<600 mm) strongly influences rural household agricultural and other investment decisions.[1] The production of short-

[1] The northern area of the Boron Secteur, with its extremely low rainfall, constitutes an entirely different set of opportunities which this paper does not examine.

season, local varieties of millet intercropped with local varieties of sorghum and beans (often for fodder) is a central feature of the limited range of agricultural decisions which comprise the Far North Portfolio. Most households also employ separate crop management strategies to optimize the production of sorghum, beans for household consumption and small parcels of dah (Hibiscus spp.) and henné (L. inermis). Farmers still look to peanuts, often intercropped with Bambara groundnuts (V. subterranea) and millet, as their main cash crop, but express interest in sesame as an additional cash crop.

The major agricultural practices and investment decisions have not changed significantly since the introduction of animal traction (both horse and oxen) and the plow. The widespread use of ridge cultivation requires fields to be hand planted because the available mechanical seeders cannot be used along ridges. In addition to soil preparation and planting, farmers generally plan two weedings of the main cereal fields, except in low rainfall years when an additional weeding increases the chance of a harvest. It is important to note that farmers continue to refine their management systems through several types of farm-level experiments including varietal trials, planting densities, agroforestry configurations, and soil management.

Common to much of West Africa, farmers in the far north use a system of "inner" fields, fertilized with animal manure and household wastes, and "outer" fields, managed under a fallow system, in order to spread their production risks and maintain soil fertility. Several traditional soil management techniques, such as ridge cultivation and rock barriers, help to guard against soil erosion and conserve soil moisture.

The use of the Acacia albida in soil management is well-known, but farmers also seek to protect a variety of other income-generating tree species in a type of extensive "agroforestry parkland." The more common trees include: Karité (V. paradoxa), Tamarind (T. indica), Baobab (A. digitata), Néré (P. biglobosa), Balanzan (A. albida), Duguru (C. pinnata), and Desert dates (B. aegyptiaca). With increasingly frequent and severe drought, several of these species have begun to disappear, taking with them their high value products and beneficial contributions to natural resource management.

Small-scale livestock production is widely practiced and managed largely by the village Peul herders. This relationship, which is found throughout the OHVN zone, is based on the complementary management specializations of herders and cultivators, and it allows households to diversify their investments in both crop and livestock production.

In addition to the cash earnings from peanuts and surplus millet production, farm households, and especially women, look to a range of less well-known agricultural products as important sources of revenue. Some of these include: A. albida seed pods as fodder, karité butter, henné dye, fruits (including those from Karité, Baobab, Tamarind, Dunguru, among others) gum arabic (A. senegal), fresh milk, meat and hides, fresh vegetables, and leaves for sauces. Households sell some of these products fresh, but process others (karité butter, henné dye and dried fruits and sauce leaves) with fairly simple and sometimes time-consuming techniques. Women in many areas are also beginning to experiment with vegetable production in small-scale market gardens. Market proximity and water shortages, however, limit current opportunities.[2]

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[2] As found throughout the OHVN zone, households in the far north also selectively pursue various other types of small-scale, skilled and unskilled income-generating activities including fodder sales, honey and wood gathering, carpentry, blacksmithing, butchery, basket-making, fishing, petty commerce and well-digging.

The Near North Portfolio

From the southern portion of Banamba Secteur and into the northern part of the Koulikoro Secteur (including the Sirakorola Secteur), annual rainfall between 600mm and 800mm defines a near north portfolio. This portfolio is based on a series of household economic opportunities that are represented by more diverse cropping systems and associated economic activities. Local varieties of millet and sorghum, are the principal cereal crops.[3] Fonio, which provides relatively high yields on the infertile fields where it is typically planted, commands a high market price throughout the year, and is cultivated for both home consumption and occasional sales. Farmers are also interested in the possibilities offered by sesame.

Given the higher rainfall, farm families complement their staple cereals and legume production with the garden-type production of numerous types of vegetables and various leaf crops, along with an "insurance" manioc crop. Farmers also use these gardens as nurseries for henné, whose dye is an important source of dry-season income. "Pourghère" (J. curcas) is commonly used as a living fence. In addition to its utility as a fence, this plant has medicinal value; and it is widely used in traditional soap production.[4]

Micro-climatic conditions create a variety of different production environments which offer a range of unique investment opportunities, including the cultivation of maize, cotton, and even small quantities of rice. Locally grown mangos are common in the Banamba market, and other high-value tree products are available from the "Karité parks," as well as from the extensive agroforestry associations of Néré, Tamarind, Baobab, Dungura, Desert Dates, Raisonier (I. microcarpa) and other species. Other specialty crop production opportunities include sugar cane, sweet potatoes, and watermelon. In addition, a growing number of women are producing dry-season vegetables for consumption and sale.

Additional income-generation opportunities arise from the value-added processing of numerous agricultural products and by-products: karité butter; the preparation of soumbala from Néré seeds; henné dye; mats made from the stalks of long-season sorghum; and, cord made from dah. Natural resource extraction, through fuelwood cutting, honey collection, traditional medicines, and non-timber products gathered from dry-land forests, also generates revenues.

Many households rely on the earnings from dry season employment elsewhere in the country. International travel in search of employment within the sub-region is apparently declining, although labor migration ("exode rural") is common, especially during poor crop years when production shortfalls must be compensated.

The Bamako Central Portfolio

The generally favorable and stable annual rainfall (800-1,000mm) permits the production of a wide variety of fruit and vegetable crops, in addition to staple cereals, maize, and legumes. But more important, access to the major roads serving Bamako encourages a

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[3] Improved varieties of these species, introduced through the FAO Seed Multiplication Program and the OHVN extension efforts, have not been widely adopted. It is reported that their yield performance and taste do not compare with local varieties.

[4] Research shows that the oil extracted from J. curcas seeds has several industrial applications and can be used as a substitute for diesel fuel (Henning, 1989; 1992; Jones and Miller, n.d.).

fairly wide range of agricultural and off-farm activities in response to Bamako market opportunities.[5] Some of these niche markets include fodder production for urban livestock, market-oriented animal production, and fresh vegetables, among others.[6] Urban business also offers significant, seasonal off-farm employment opportunities.

Absentee landlords, including both government officers and traders from Bamako, are some of the major investors in crop and animal production. Their small- to medium-scale plantations and agroforestry systems are widespread throughout the greater Bamako area and along the major roads out of the capital.

The Southeast Portfolio

In the Secteurs of Gouani, Ouélésébougou and the southern parts of Dangassa, cotton production dominates most farm family decisions. Annual average rainfall in excess of 1,000 mm permits the cultivation of a broad range of crops.

Farmers rely primarily on their numerous local varieties of sorghum (up to 8 varieties), millet and maize to meet consumption needs. While millet is of declining importance among farm households in the higher rainfall areas, farmers still cultivate short-season varieties, as well as short-season determinant varieties of maize, for protection during poor rainfall years.

In addition to these staple cereals, household production includes beans, peanuts, Bambara groundnuts, and gourds (calabash and edible varieties) in their cropping rotations. Many families also plant watermelon as a late season cash crop. Small vegetable gardens, managed by women, produce numerous condiments and often include an annual tuber crop such as yams, and an "insurance crop" of manioc. Yams appear to be an important food crop in some communities around the Ouélésébougou area. Gardens in this same area also supply large quantities of tomatoes, peppers, eggplants and other vegetables for the Bamako market.

Irrigated rice and dry-season tobacco production is possible for those living near the Niger River.[7] The extensive Karité parks interspersed with Néré, Tamarind, and other species are widely used to meet both consumption and cash needs. Bee keeping is another prominent activity in this portfolio.

Soil fertility concerns, linked to cotton production, and increasing weed problems in cereals, play an important role in most crop management strategies. In addition, land pressure

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[5] This area covers portions of several OHVN Secteurs (eastern Kati, southern Koulikoro, northern Bancoumana and Dangassa and parts of western Gouani). The significantly different agro-ecological conditions in the Kati hill-area may be the basis for identifying a separate portfolio.

[6] The activities described as part of the Bamako portfolio are separate from the very small, but intensively managed, urban market gardens found throughout Bamako proper. These gardens provide a major share of the fresh vegetables consumed in Bamako. Because of the highly specific nature of these urban garden systems, plus special land tenure issues, they constitute a special sub-set of the Bamako portfolio. To our knowledge, no public or private technical assistance agency or organization serves these producers.

[7] Throughout the zone villages located on both banks of the Niger River have distinct production opportunities which should be considered as a separate "River Portfolio."

in some areas has tended to restrict women's access to fields.[8] When they do have access to land, women tend to cultivate peanuts, intercropped with Bambara groundnuts, millet and okra. Most villages in this portfolio are situated near low-lying areas, where women engage in rice cultivation.

With a secure and fairly profitable money-making opportunity in cotton production, off-farm non-agricultural activities play a less important role in this portfolio.

The Southwest Portfolio

Throughout most of the Bancoumana Secteur and all of the Kangaba Secteur, farmers manage widely diverse cropping systems. Highly integrated agroforestry systems, including plantations of mango, citrus, guava, bananas, and other perennial fruit trees intercropped with up to 15 different cereal and vegetable crops, are common for many households. In addition, polders constructed during the colonial era, and improved low-lying areas with wire-mesh and rock check-dams, allow extensive production of upland and floating rice varieties.

Most families manage their own nurseries and have a well for dry season watering. Some farmers, as well, have significant grafting expertise. "Pourghère" fencing is common, and the seeds are also used by women for local medicines and for soap production. As found elsewhere in the zone, farmers rely an a variety of traditional technologies to protect their crop yields. "Bitter" herbs, neem leaves, smoking and ashes are commonly used as protective agents in crop storage.

Management strategies are based on the extensive use of local varieties. For example, in crop rotations, varieties are often selected for their tolerance to weed pressure. Rice producers in particular, draw on more than a dozen local varieties to deal with both weed pressures and anticipated water depth. In some locations, varieties of "red" (non-rhizotomous) rice, selected for their weed resistance, are used for the last crop in the rotation. Other varieties of "red" rice are used in rattoon culture, and are selected for their ability to be harvested three times during the growing period.

Declining precipitation over the past 25 years is cited by farmers as the principal reason for major changes in their agricultural systems, especially rice production. Many of the polders and flood areas no longer receive sufficient quantities of water to maintain desired production levels. In some locations, cotton production has partly compensated for the decline in rice cultivation. However, since cotton is managed solely by men, this change in cropping patterns has negatively affected women who previously invested in rice production.

Peul herders, driven southward during the droughts, have settled near some villages. In most cases, these herders have entered into reciprocal relationships with agricultural villagers to manage village cattle in exchange for rights to cultivate land and other payments.

In the absence of a strong orientation towards a single cash crop, households look to a wide range of income-earning opportunities from specialty crops such as gumbo and onions, to a number of non-farm and non-agricultural activities. Commerce along the Guinea frontier and gold digging are among some of the most important and common activi-

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[8] In some areas women are able to secure only "usufruct" rights to their husbands fields during the peanut rotation in the cropping cycle.

ties. In addition, farmers with specific skills, such as tree grafting, seek seasonal employment on private plantations near Bamako.

Issues

Crop Management Systems

Households rely heavily on their detailed environmental knowledge to adjust a wide range of crop management strategies in response to changing environmental conditions and family needs. These strategies include crop rotations, intercropping, the use of multiple varieties of the major staples, and agroforestry systems.[9] Farm management studies in the OHVN zone, and elsewhere in West Africa, confirm the profitability, and greater returns to labor, of some of these intercropping and agroforestry arrangements when compared with high input mono-culture systems under similar agroecological conditions (Norman, et al., 1979; Richards, 1985; Kater et al., 1992; Kessler, 1992).

The agroecological advantages of these management strategies have also been identified. Most intercropping practices, for example, exhibit higher levels of overall productivity in terms of the land equivalent ratio,[10] reduced insect attacks and spread of disease, improved soil conservation, and greater yield and economic stability under adverse climatic and uncertain market conditions (see Altieri, 1987; Francis, 1986; Vandermeer, 1989).

Despite the agroecological sophistication of these systems, it is extremely difficult for most households to generate enough surplus for capital accumulation and reinvestment from the production of low-value cereals. The development of improved technical packages and new marketing outlets that overcome this dilemma will be especially challenging, especially in the OHVN northern secteurs.

Household Income Generation

As the description of the various portfolios indicates, farm households throughout the OHVN zone engage in a wide range of income-generating activities. In other words, households pursue a combination of farm and non-farm activities to assure their economic security and well-being.[11]

On-Farm Agricultural. In addition to commodity sales, households rely heavily on earnings from different on-farm processing activities. Farmers identify over a dozen major income-generating activities.

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[9]DRSPR research has identified 16 different intercropping systems based on 6 major species (peanuts, millet, sorghum, beans, maize, dah)(DRSPR, 1992a). Farmers commonly intercrop dah with sorghum in at least four different ways: as a field border plant; alternating plants within rows; alternating rows; and planted between rows. Each arrangement produces a different set of inter-species dynamics, influencing the production of each crop and the overall behavior of the system.

[10]The Land Equivalent Ratio (LER) is the ratio of land needed to produce an equivalent amount under mono-cropping as produced through the intercropping system.

[11]Also see Richards, Stewart, and Vierich cited in Moris, 1991.

Table 2.1 On-Farm Processing*

Gardening (dried veg.)	Tamarind (fresh, dried)	Forage (dried; pods)
Karité (butter, etc.)	Cord (Dah, Sisal)	Baobab (leaves & fruit)
Néré (soumbala)	Henné (dye)	Skins
Dah (dried)	Secco	Milk (cheese)
Mats (sorghum stalks)	Cattle-fattening	

*From group interviews and DRSPR, 1991a.

Many of these activities involve the transformation of "secondary," or indigenous crops that have not attracted the attention of researchers or development agencies. Nevertheless, as one study found, karité processing, next to cultivation, is women's most important economic activity (Luery, 1989), and drives the local economies in many areas (Grigsby, 1989).[12]

On-Farm Non-Agricultural. On-farm non-agricultural activities include the gathering of wild fruits, wild and cultured honey collection, fuelwood cutting, fodder production, and pottery making, among others. These activities, which require various degrees of skill or the use of specialized equipment (see below), contribute to overall household financial security. They are especially important sources of income for women, the elderly and economically marginal households.

Table 2.2 Types of Non-Agricultural On-Farm Income Generation*

Skilled		**UnSkilled**	
Bee Keeping	Jewelry Making	Wood Cutting	Wild Fruits
Baking	Hunting/Fishing	Petty Commerce	Cloth Dying
Tailoring	Pottery	Basket Weaving	Charcoal
Trad. Med.	Carpentry	Cloth Making	
Well-digging	Midwifery	Yarn Spinning	

*From group interviews; DRSPR, 1991a; Luery, 1989.

Off-Farm. For many households in different areas of the zone, off-farm employment, or "exode rural," is as important in the overall household economic strategy as any of the individual agricultural enterprises. "Exode rural" is commonly used to cover shortfalls in household food production, to supplement other activities, and to take advantage of surplus labor or capitalize on unique money-making opportunities.

One of the most widely discussed and criticized off-farm employment activities involves gold-digging. In villages along both sides of the Niger River in the southern part of the OHVN zone, this activity is one of the most important dry-season activities (Luery, 1989;

[12]In addition, studies of the major agroforestry systems involving Karité and Néré, report that the profits from these species surpass the reduction in crop yields caused by their presence (Kater et al., 1992; Kessler, 1992).

DRSPR, 1991a). Its importance varies by location, with as many as 95 percent of the households in some villages reporting benefits (DRSPR, 1991a). Those involved in gold digging varies by village. In some villages 75 percent of the young men are involved in digging, while in another village gold digging occupies 90 percent of the women (DRSPR, 1991a). On a day-labor basis, women who work in the gold fields can earn wages comparable to those from group field labor. In gold digging, however, women can personally keep all of their earned wages (Luery, 1989).

Farmer-Driven Information Systems

The household knowledge base builds on tradition, personal experience and experimentation, as well as information exchanged with other individuals and received from a variety of outside agencies. It is known, for example, that villagers have developed detailed soil classification systems which are consistent with, and sometimes more detailed, than formal classification systems (see DER, 1992; Aubert and Newsly (1949) in Naimir, 1990). Farmers are also keenly aware of the observable characteristics of the major insect species which affect crop production and storage (see Bently, 1992), and they commonly base planting decisions on the flowering of certain plants and trees, and the appearance and behavior of certain bird species.

In addition, both women and men farmers, design and carry-out a wide variety of experiments and tests. This informal experimentation and testing ranges from varietal trials conducted in test plots and under normal field conditions, to tests of plant densities and seeding patterns, intercropping arrangements, soil organic matter management and varietal development through seed stock selection and grafting of new fruit tree varieties.

Farmers regularly exchange the results of their "informal" research, as well as information received from the formal sector, through established social networks (see McCorkle et al., 1988). Farmers receive genetic material, information on planting methods and other agricultural practices from friends and relatives who reside in, or have visited, other areas outside of the zone. Genetic material, because of its mobility, is one of the most frequently exchanged agricultural "goods" among farmers. OHVN farmers also receive information from a number of other sources, including commercial firms, international traders, and from different projects and services.

Options

Alternative Technologies

In order to help farm families reduce risk and uncertainty, while increasing the potential profitability of their production systems, the various technical and financial assistance agencies (i.e. OHVN, CLUSA, commercial banks) will need to fine-tune, adapt and match many of their efforts to farmers' conditions. For example, in the "far north" where horse-traction dominates, the technical package for farmers and assistance to local blacksmiths could focus on the fabrication of lighter weight plows and husbandry information suitable for horses. Furthermore, throughout the northern areas, loan conditions will need to be defined that accommodate the high risk of crop failure due to recurrent drought conditions.

In addition, marketing opportunities could be examined for many of the higher value commodities and on-farm processed products. Such opportunities could represent a major

step toward increasing farm household revenues.[13] Proposals to concentrate on selected high value export products such as mangoes or bobby beans, however, may favor only a limited group of farmers, such as the absentee landowners around Bamako (see Abt, 1992; Martin, 1990). As McCorkle and Kamité (1986: 39-40) noted, "focusing on one or two crops does great injustice to the diversity of both communities and household production portfolios. Taken to extremes, such a development strategy may not constitute "development" at all. In fact, over-concentration upon a single cash crop may expose families to greater economic, nutritional, and other risks."

An alternative strategy could be built around a range of niche opportunities which exist for the so-called "lost crop species" and other underexploited, indigenous resources which may have economic potential. Wild grains, such as fonio for example, can produce at levels equivalent to sesame (1 MT/ha)(de Wit, 1992). Some of these lost crops also have strong domestic and regional markets. The average price for fonio is second only to peanuts; several crops do not have readily available substitutes.[14]

Based on the findings of a major study being conducted by the National Research Council,[15] a series of "opportunity analyses" to identify the profitability and market potential of local crops and products might be useful. Such analyses could survey the range of experiences in Mali and the region, as well as the use of new technologies and the commercial production of crops grown in other semi-arid regions.[16]

Household Knowledge

The incorporation of farm household knowledge and practices into the research and development process should improve the adoption rates of new technical packages and help to diffuse traditional "best practices."[17] In order to bring this knowledge, and added capacity, into the research and development process, however, many standard operating procedures in both research and extension will need to be revised (see Chapter III).

Many of the DRSPR research findings confirm the technical viability of farmers' practices.

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[13]Guatemala and Mexico, for example, export fresh and processed tamarind to the US (NRC, 1993). This could also include a study of other opportunities such as the export of indigenous herbs for products like those marketed by African Botanicals Inc. in the U.S.

[14]A marketing analysis in northern Mali found that upwards of 30% of the kCal intake and 16% of weekly cereal expenditures of some households involve indigenous grains (Steffen, 1992).

[15]See Lost Crops of Africa: Vol.1 Grains, NRC, forthcoming. Separate volumes on cultivated and wild fruit species are also forthcoming in this multi-volume series.

[16]For example, the Gum Arabic (A. senegal) project in Niger. New technologies include the preparation of fruit leather (see Amoriggi, 1992), unique processing potentials of traditional cereals (see Fonana and Roonery, nd; Young et al., 1989), and improved technologies such as solar driers and oil presses which would increase efficiency and reduce the high labor demands of many traditional processing activities (Hyman, 1991). See the discussion of Jojoba and Guayule, for example, in other semi-arid regions (NRC, 1985)(see also NRC, 1975; Hinman and Hinman, 1991). The International Centre for Underutilized Crops, Wyseplan Building, Wye College University of London, Ashford, Kent TV25 5AH, UK, provides specialized short-course training, and acts as an information center conducting searches and answering specific questions (including processing and marketing information) on "lost crop" species.

[17]One DRSPR review of traditional soap-making practices, for example, identified one production formula that yielded profits which were 100 percent higher than other formulas used in the OHVN zone (DRSPR, 1992a).

In addition, there appear to be very few technologies "on the shelf," or even "in the pipeline" which might provide substantive improvements to current production systems.[18] Thus, a principal research challenge is to find ways in which to develop improved technologies based on what farmers already know and to work together with farmers to identify innovations.

Indigenous knowledge and experience, however, should not be taken as a development panacea. What such knowledge offers is an opportunity to reduce research and development costs, a way to improve the relevance of the technologies that are generated, and the potential to increase the spread of useful innovations (Warren, 1991).

Research and extension approaches that incorporate indigenous knowledge and experience into the more formal research process are being developed and tested elsewhere in the Sahel and in sub-Saharan Africa. The success of these efforts will be based largely on the commitment of decision-makers to bring together the different, but complementary resources and capacities of farmers, research and extension in technology development and diffusion (see Chapter III)[19].

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[18] This is true even regionally. ICRISAT screened over 7,000 sorghum varieties for promotion in Burkina Faso: only two proved superior to local tested varieties. Of the 3,000 millet varieties also screened, none were found superior to local varieties when grown under field conditions (Matlon, 1985).

[19] Leadership in Mali is being provided by Mme. Tapo Touga Nadio, Chef de Cabinet, Ministére de Developpement Rural et de l'Environnement, who is on the International Advisory Board of CIKARD and who is seeking to establish MARCIK, the Malian Resource Center for Indigenous knowledge.

III. ORGANIZATIONS AND THEIR CONTRIBUTIONS

OHVN

Extension

In response to the government's 1987 policy to restructure the country's rural development organizations (ODRs), the OHVN began to overhaul its extension (vulgarisation) program in 1988. Under a reorganized Extension Division (Division of Vulgarisation), the three main restructuring measures included: significant cuts in field staff; the increased transfer of extension responsibilities to rural villages; improved technical support and redefined jobs for extension field agents (see OHVN, 1988).

As part of this restructuring process, the OHVN increased the number of extension sectors (secteur) from six to ten and replaced its four tiered extension organization (headquarters, sector, ZER, secteur de base), with a three tiered structure (headquarters, sectors, sous-secteur). This reorganization permitted an almost 50 percent cut in the number of extension field staff. At the same time, the OHVN created the animatrice positions to coordinate women's programs in each secteur.[20]

In addition, the OHVN began to apply several of the principles which characterize the Training and Visit system of extension (see Benor, et al., 1984). The Office transferred responsibility for agricultural credit, marketing and input supply out of extension and redefined field staff jobs to focus only on extension. Seven new Subject Matter Specialist positions (SMS)[21] were created at the headquarters level to support and strengthen the training and technical backstopping of field agents, and to act as the primary link between the OHVN and various research programs. Field agents continued to work with village extension groups (groupements de vulgarisation) and contact farmers (paysans de contact).

Consistent with the government's objectives for the "responsabilisation du monde rural," the OHVN relies on self-managed extension villages (village auto-encadré) as a major goal of its programming. According to the OHVN, these villages, some of which were selected in the mid-1980s, have the level of technical skills to meet their own extension needs.

OHVN Technical Recommendations

Seventeen technical themes (thèmes techniques) comprise the OHVN extension program. These themes can be roughly divided into four areas of emphasis: crop production, animal production and management, natural resource management, and women's activities. Each theme is summarized by a series of technical sheets (fiche technique) and distributed to the field agents for discussion with farmers.

The core of the OHVN program consists of a "package" of well-known agricultural tech-

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[20] Boron is the only secteur without an animatrice.

[21] The Subject Matter Specialists replace the position of Research Coordinator. These seven new positions are divided between two sections: Crop and Animal Production--agronomy; animal husbandry; crop protection; irrigation and mechanization; tobacco; and, Vulgarisation and Women's Activities--extension; women's activities.

nologies, or thèmes classiques.[22] This package includes recommendations on the use of improved seed varieties and cultivation practices, the introduction of animal traction, and the use of inputs (fertilizer, herbicide, pesticide). In response to more recent concerns with sustainable agriculture, natural resource management, integrated pest management and gender issues, the OHVN has introduced supplementary recommendations covering these issues as well.

Research Relations

The technical information used by the OHVN extension program depends heavily on the Volet OHV of the IER Production Systems Program. The principal objective of the five-year (1987-1992) working agreement (protocole d'accord) between the OHVN and the DRSPR involves the preparation of a household classification scheme that could be used to target the technical recommendations to different household conditions.[23]

The DRSPR (Volet OHV) program operates in a number of research and pre-vulgarisation villages throughout the zone. The five research villages are located in the different recommendation domains. During annual, joint technical review and planning meetings, DRSPR researchers report their research results and plan the next year's trials with OHVN Bamako staff. Technologies that perform well in village trials may be moved into a one to two-year pre-vulgarisation, or on-farm experimentation phase. Depending upon the results of this phase, a technical recommendation and in-service training program are prepared for field staff.

Several other IER programs, governmental departments (e.g., Agrométéo), and some input supply companies (e.g. Comadis, Ciba-Geigy) also carry-out research in the zone. The private companies emphasize on-farm fertilizer, varietal and equipment trials that serve as both research experiments and farmer-managed demonstrations of their products. The Agrométéo test program accumulates data on the relationships between cereal yields, different planting dates and rainfall levels under different cultural practices and levels of fertilizer usage. Other units within the IER also conduct a number of varietal trials. During the 1991-92 campaign, the OHVN estimated that over 170 trials and experiments were carried out in the zone by these agencies (OHVN, 1992a).

The T&V Approach[24]

Consistent with the T&V approach, each chef sous-secteur is supposed to adhere to a regular schedule of sector-level meetings and visits with farmer groups. They are also expected to record field visits, farmers questions, and other activities and observations in a series of notebooks. These notebooks are intended to help monitor field agent performance.

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[22] These "Thèmes Classiques" have been the mainstay of agricultural development programs throughout West Africa for many years. See the Memento Agronome (CIRAD), or the Memento Techniques Culturales (IER, 1990).

[23] Based on OHVN-DRSPR studies between 1984-1986, a classification scheme was developed that the uses animal traction and equipment ownership as its prime indicators (OHVN, 1986). In 1991, the DRSPR developed a modified definition that accounts for several social and economic factors related to the adoption of themes (see DRSPR, 1992a).

[24] During the past three agricultural seasons, the OHVN has implemented the T&V system on an experimental basis in selected villages in the northern secteurs. T&V is now the official OHVN approach in all of its northern secteurs (Boron, Banamba, Siraïkorola, Koulikoro).

Groupements de Vulgarisation. There are approximately 540 groupements de vulgarisation (GV) in the zone (OHVN, 1992a).[25] These extension groups are limited to 10-15 members in order to facilitate the transfer of the technical recommendations from the OHVN to farmers. Contact farmers, or paysans de contact work closely with the chef sous-secteurs. These farmers often manage demonstration plots to showcase technologies contained in the OHVN technical package.[26] These plots are also featured in the annual village demonstrations that are carried out in many villages throughout the zone.

Villages Auto-Encadrés. Upon the recommendation of the chef secteur, a village can become a self-managed extension village (village auto-encadré). This recommendation is based on the number of farmers who follow the technical recommendations and on the competence of the village animateurs.[27] In the villages auto-encadrés, the village animateurs assume nearly all of the regular extension duties previously handled by the chef sous-secteur.

Field Days. In addition to the GV activities, the OHVN coordinates a series of annual farmer field days. The contact farmers who are nominated to host the field day demonstrations receive several visits from the chef secteur and the subject-matter specialists to assure that their fields are properly laid-out and managed. Seven secteurs conducted field days during the 1991-92 season; in some cases over 700 farmers may attend these events.

Farmer-to-Farmer Visits. The OHVN, in coordination with the DRSPR and CMDT, has facilitated several farmer-to-farmer exchanges. Most visits take place within the OHVN and CMDT zones, but some farmers have visited Niger and the "pays Dogon" to view soil and water conservation practices.

Through these visits, the group meetings and other contacts, the OHVN estimates that over 26,000 farmers, or 9,000 out of the 40,000 households in the zone, were contacted during the 1991-92 campaign (OHVN, 1992b). This includes the roughly 6,000 men farmers who participate in the groupements de vulgarisation (OHVN, 1992a), the 10,000 women contacted by the 8 animatrices during this same period (OHVN, 1992a), and over 4,000 who attended a journée agricole.

Issues

Technical Themes

A principal objective of the OHVN-DRSPR research agreement has been to improve the ability to target the OHVN technical recommendations. However, the OHVN package of technical recommendations continues to be largely unresponsive to the variability in farmers' conditions throughout the zone.[28]

Adoption. The reported adoption rates for 13 of the 17 technical themes range from over

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[25] Larger villages may have more than one GV. Some GVs are found in villages that have not yet organized an AV.

[26] The DCDR reports that over 70 percent of the contact farmers manage demonstration plots (OHVN, 1992c).

[27] There are 44 "auto-encadré" villages in five secteurs of the OHVN zone. Nearly two-thirds (29), are located in the Ouéléssébougou and Gouani Secteurs (OHVN, 1992c).

[28] See Ronco, 1985 and LeBeau, 1986 for earlier, and similar critiques of the OHVN technical program.

100 percent to more than 1000 percent above project goals (OHVN, 1992a). Other studies of crop production do not suggest that such a dramatic transformation is taking place.[29] Preliminary estimates from a 1992 study of the impact of maize research indicate adoption rates well below 25 percent for improved maize production technologies (A. Diop personal communication).[30]

A 1992 DRSPR survey found that animal traction is the most widely adopted technical theme; nearly 80 percent of the households surveyed use the technology. The adoption rates for other OHVN technical recommendations include: cotton complex fertilizer (47%); organic manures (50%); urea (38%); seeding guides (53%); pesticides (35%); improved maize and sorghum varieties (30% and 26%)(DRSPR, 1992a).[31]

Appropriateness. It is widely recognized that farmers are receptive to technologies that help them to improve overall household production and/or the profitability of a specific enterprise. The adoption of some technologies, such as animal traction, however, requires access to credit and the possibility of generating enough income to cover loan repayments. Technical recommendations that do not respond to these conditions tend to be characterized by low adoption rates. Nearly 70 percent of the extension agents note difficulties in getting farmers to adopt the new varieties.[32] A similar percentage of the field agents report that either economic constraints (high prices and lack of access to credit) or perceived technical shortcomings compared with current practices keep adoption rates low.

Technical Coherence. The OHVN technical package also reflects internal contradictions. For years, farmers have refused to adopt the technical recommendation of flat plowing their fields. A recent SRCVO study (1992) tentatively confirms that farmers' preferred practice of ridge plowing more effectively conserves soil moisture (a major production constraint in the semi-arid north) than flat plowing. Ridge cultivation also effectively

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[29] Cereals production data for the six year period, 1986-1991, also appear to be consistently overreported. OHVN figures show cereal crop production (except maize) increasing at average annual rates of 1 to 18 percent (OHVN, 1992a). If the data are corrected to eliminate the effects of the 1990-91 poor growing season (while retaining the 1991/92 figures), annual production increases drop to only .18 percent for sorghum and 3.48 percent for millet. While the data show a moderate increase in rice productivity (>3 percent), other studies identify a decline in rice yields for the period 1981-1991 (Anon., nd).

[30] Adoption rates for other themes such as "parcs ameliorés," enumerate many structures that were constructed by the DRSPR as part of their field experiments and then given to villages.

[31] The small sample size and unequal representation between the five villages surveyed (30 households in the north vs 100 households from a single village in the south) weakens the reliability of this data. In addition, because only DRSPR research villages were surveyed, these results cannot be used to generalize on adoption rates across the zone as a whole.
Moreover, it would be incorrect to attribute many of these results to the DRSPR/OHVN programs. For example, fertilization with organic manure is a long standing traditional technology used throughout West Africa. Similarly, traditional ridging practices provide the seeding "guides" used in many areas; animal traction has been a part of the "thèmes classiques" for many years. In addition, the reported adoption rates do not reflect the contributions of other programs. Pesticides have been regularly distributed without charge during locust attacks (Kremer and Sidibé, 1991) and in some cases, ONGs have subsidized their purchase. Finally, significant discrepancies arise among various reports. One OHVN report covering the entire zone estimates that 1,154 cereal producers used improved varieties in 1991/92. If this refers to the entire zone (40,000 households), with one person using improved varieties per household, this nets an adoption rate of less than 3 percent for improved cereals varieties as a whole.

[32] Most farmers, on the other hand, are regularly in search of superior varieties. In group discussions women and men reported using an improved variety as their preferred variety less than 10 percent of the time.

reduces soil erosion. In other words, the recommendation on flat plowing contradicts other recommendations concerning soil and water conservation.

A large part of the OHVN technical program is oriented towards encouraging farmers to increase their level of mechanization, including the use of seeders. To operate a seeder, farmers must flat plow their fields and remove the majority of the crop stubble to keep the seeders from jamming and skipping. Removal of this residue further reduces soil and water conservation capacity.[33] In sum, the themes of mechanization and soil and water conservation, as currently extended, reflect serious incompatibilities.

Targeting. It appears that the DRSPR recommendation domains and household classification scheme do not effectively help the OHVN to target the technical recommendations to different farm-level conditions. A draft 1992 report on the extension program notes that "on peut remarquer que les thèmes dans leur généralité sont dispensés sans considération quant à leur pertinence (besoins exprimés par des paysans)." For example, the use of fertilizer is one of the most widely popularized themes and has been extended to 57 percent of the GVs in the zone, including 62 percent of those in Banamba secteur. However, less than 5 percent of the farmers in each of the northern secteurs (Sirakorola, Banamba, Boron) have adopted the theme, and neither the OHVN nor the banks provide production credit to the secteur of Boron. These areas produce very little cotton and the use of fertilizer on millet and sorghum has long been recognized as unprofitable (DRSPR, 1988a).

Research Base. The annual IER Commissions Techniques and other MAEE reports provide a considerable amount of research data. There is little evidence, however, that many research results find their way into the OHVN technical recommendations. As the directors of the OHVN vulgarisation division and the DRSPR have noted, "difficultés dans l'obtention des conclusions de recherche à la vulgarisation" are among the major constraints on the OHVN program. The results of all of the 1990/91 and 1991/92 DRSPR pre-vulgarisation trials were non-significant when compared with farmers' practices (DRSPR, 1991a; 1992a). In addition, they agreed that the "insuffissance de coordination entre les differents structures de la recherche" leads to "une pléthore des tests traitants les mêmes thèmes" (Sélingué, 1992).

Moreover, farmer contact with researchers appears minimal.[34] Farmers are asked to contribute only land and labor in the researcher-designed, on-farm pre-extension and research trials (DRSPR, 1991d; 1992d). Farmer input tends to be limited to post-trial comments which do not appear to guide subsequent research investigation.

Extension Organization and Operation

Communication. The effectiveness of the T&V approach depends largely on the ease with which information flows up the system from the field agents. In the OHVN, there is little evidence of effective feedback from farmers, or the exchange of experiences among field agents. This is not a new problem in the OHVN (see USAID 1982; Ronco 1985; Kagbo 1986; Lebeau 1986). Over 45 percent of the field staff report knowledge of a variety or

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[33] In addition to the well-known soil and water conserving attributes of contour plowing with ridges, crop residues can further aid moisture and soil conservation as well as serve as "an extremely effective amendment to the sandy, infertile soils of semiarid West Africa." (Soil Management CRSP, 1992).

[34] Farmers also complain to researchers of their inadequate contact with OHVN field staff (DRSPR, 1992c).

indigenous practice that is superior to the technical recommendations. Fewer than 10 percent, however, have ever communicated this information to others in the vulgarisation service, or to researchers. Moreover, the OHVN monthly program meetings are not managed to solicit feedback from the field staff, leading one Chef Secteur to comment that "these meetings block the advancement of the OHVN."

T & V Operation[35]. The OHVN faces difficulties in preparing and distributing new technical support materials for its field agents. The SMSs, who are charged with the preparation of new fiches techniques, travel frequently and have not yet developed a significant quantity of new extension material. The technical material that has been produced is poorly distributed; the sector offices do not have complete sets of the fiches techniques. Out of six sector files examined, one contained no fiches, three contained around a dozen, one had nearly two dozen fiches on 8-10 themes, and another had a very extensive collection. Many of the chefs sous-secteurs have little or no written information on the technical recommendations. As one agent reported, "I deplore the total lack of fiches techniques on the different themes. Extension agents are asked to pass on the technical themes without anything written. In my opinion no one can know all about the themes without a minimum of documentation." A complete collection of the fiches cannot be assembled at the OHVN headquarters.

Groupement de Vulgarisation. Most of the chefs sous-secteurs report considerable difficulty in convening GV meetings. When a meeting is held, attendance is less than one-half of the reported members and averages only about 6 farmers.[36] Moreover, farmers do not attend on a regular basis; GV membership tends "to roll" as members attend a few meetings and then drop out. The GV attendance problems may be closely linked to, and indicative of, the static and marginally relevant nature of the technical information provided through the extension program. Some chef sous-secteurs report that the lack of new extension material (fiches techniques, video, radio broadcasts) is one reason why they are unable to attract farmers to GV meetings.

Role of the Animateurs. Many of the animateurs, who have been induced to assume the duties of the former chefs de base, feel that they are being exploited as unpaid OHVN employees. In many cases the villagers themselves view the animateurs as part of the OHVN system, and not as part of the village structure. Animateurs in several villages plan to abandon their positions, and under the current conditions, admit that it will be difficult to recruit replacements.

The OHVN is not the only development actor which relies on the animateurs. Given the small number of literate and numerate villagers, most of the NGOs and other governmental projects also look to the animateurs as their village representatives or counterparts. For example, the Agrométéo program relies on the animateurs to collect data on rainfall and cereals production and to transport these figures into the sector offices every ten days. The FAO seed multiplication program also looks to the AVs and their animateurs to organize meetings, manage the financial accounts, and market the seed.

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[35] The lack of technical information for field agents has been discussed for some time: see Ronco, 1985; Kagbo, 1986; Lebeau, 1986; OHVN, 1988; OHVN, 1989; OHVN, 1991a; OHVN, 1991b; Sélingue, 1992.

[36] It is estimated that only 400 of the reported 538 GV's actually exist and regularly receive OHVN support. If only 6 farmers attend each meeting, then the number of farmer contacts through the GV is over-reported by 150 percent.

This issue is most acute in the auto-encadré villages where animateurs are responsible for managing the extension meetings and activities with the GVs. Animateurs from these villages are required to attend monthly meetings with representatives from other auto-encadré villages in their sector, in addition to attending regular training meetings at the sector offices. They also play central roles in the operation of their AVs, which requires them to collect orders for input supplies, make several trips to Bamako to secure loan agreements, place purchase orders, and supervise the distribution of goods and collect loan repayments. Where collective agreements are made between several AVs, the animateurs must attend additional meetings to organize these collective orders, and negotiate the frequent discrepancies which emerge between amounts ordered and received.

Animateurs in many cases may be away from their fields for up to two weeks each month during the growing season. The animateurs from auto-encadré villages usually receive some compensation from the AV (not true of animateurs from all villages), although they rarely view this compensation as adequate.

New programs to strengthen community-based natural resource management threaten to add to the load of the already over-burdened animateurs. The GRAAP program, which is planned for expansion throughout the zone, and a new World Bank-financed program are both oriented towards village-level natural resource planning and management and will also undoubtedly seek to employ the animateurs.

Multi-Media Usage. The extension program makes virtually no use of available media options to reach farmers. The technical recommendations have not been compiled and completely translated into Bambara for widespread distribution to farmers. Rural radio broadcasts are infrequent and generally produced by the public radio agency with little OHVN involvement.[37]

Farmers and field agents report the value of farmer-to-farmer visits, but these visits have been very limited. In addition, those who have participated in these visits complain about the lack of follow-up. For example, following the visits neither research nor extension personnel have provided unique crop varieties, often highlighted during the visits, to farmers. As a result, many farmers have been forced to abandon plans to adopt the technologies that they were taken to see during the visits.[38]

Other opportunities also fail to live up to the expectations of many farmers. They appreciate the journées agricoles, for example, but tend to feel that the ceremonial features, with high profile visits from Bamako dignitaries, have largely replaced their role as an educational experience.[39]

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[37] During the 1991/92 season, the government radio station broadcast programs dealing with such topics as cotton production, use of herbicides (on maize and cotton), animal husbandry, and the importance of renewing hybrid seeds. The station also covered functional literacy training in Ouélessébougou and a "field day" in Kati.

[38] For example, farmers from some of the northern secteurs were taken to see a millet-sorghum intercropping system which involved a dwarf variety of millet that was protected from bird predation by the taller stalks of traditional sorghum varieties. Seeds for the dwarf millet variety were not made available to farmers. Farmers in some southern secteurs report similar results from their visit to the CMDT zone.

[39] Without equipment, the OHVN has not been able to implement its planned audio-visual program. At the same time, the OHVN has not taken advantage of the $2.1 million FAO/PNUD-financed Centre for Audio-Visual Production Services (FAO, 1992).

Focus on Women. Fewer than a dozen animatrices are responsible for working with all the women in the zone (Boron was still without an animatrice in 1992). Compared to the 80 chefs sous-secteurs who work with male farmers, the ability of the OHVN to reach women farmers is extremely limited at best (see the Sélingué Seminar Report, Appendix C). Village women repeatedly mention that their requests for assistance go unheeded. For those contacted, the high farmer-animatrice ratio makes it impossible to provide quality services. With limited personnel who are also effectively separated from regular extension activities, the OHVN cannot be expected to carry-out a successful program that responds to women's needs and interests.[40]

Options

Technical Themes

The OHVN and DRSPR should improve the methods for assessing the adoption of technical recommendations. The use of more realistic measures and a more effective monitoring capacity could help in defining program impact, and in identifying weaknesses in the technical program.

A joint OHVN-DRSPR review of the OHVN technical program should focus on an evaluation of the appropriateness and accuracy of specific themes. This evaluation could help to remove inconsistencies among some of the themes as well as help in the preparation of a technical package(s) which can be targeted to households in different areas of the OHVN zone.[41]

Prior to such a review, however, the OHVN will need to identify, consolidate and organize all of its technical messages. Each SMS should be able to review and bring together all of the fiches techniques in their respective areas of specialization. The updated package could be distributed to field agents in a form similar to the recently completed booklet on gardening.[42]

Organizational Considerations

Given the agro-ecological diversity of the OHVN zone, the OHVN should examine a pilot program to decentralize program planning. This would permit field offices to begin adapting the extension package to respond to the specific development opportunities and production constraints which confront farmers in the different areas. The subject-matter specialists could play a key role in backstopping the field staff to customize the extension themes.

The relative lack of improved on-the-shelf technology, especially for resource poor farmers, combined with the extensive, but untapped, body of knowledge held by farmers and the agroecological diversity throughout the OHVN zone, represent real challenges to the OHVN extension program. Given these conditions, the effectiveness of the T&V approach at the level of each secteur and sous-secteur will depend largely upon the ability of

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[40] The chefs sous-secteurs spend less than one percent of their time working with women (OHVN, 1990a).

[41] The current household classification scheme is most appropriate for program monitoring in the assessment of which farmers benefit from different themes. It is not useful as a tool for targeting extension messages to the conditions in different areas of the OHVN zone.

[42] In the long-run it might be more cost effective to put the fiches in three-hole binders. This would facilitate the process of up-dating the fiches and would also help in preparing materials which are customized to the different agro-ecological areas in the OHVN zone.

OHVN agents to establish truly collaborative partnerships with farmers and farmer groups. In order to foster beneficial partnerships, the OHVN will need to assure that its operational and personnel policies encourage field agents to draw more heavily on the knowledge, skills and resources of farm households and farmer groups.[43]

Field agents will also need to be trained to learn how to help in customizing the OHVN extension package. They will need to learn how to conduct assessments of the use of indigenous knowledge and how to establish strong collaborative working relations with farmers.

Developing the ability to work with women farmers may be among the most critical needs for field agents. Animatrices contribute to the OHVN extension program, but the OHVN cannot afford to create a parallel extension program for women. Furthermore, a separate program cannot be justified. The OHVN will need to reorient its current program and find ways to bring women farmers into its extension activities.

The OHVN could examine several policies and approaches that might encourage a greater and more direct role for farmers in the extension program. Field agents might be encouraged to identify and help farmers publicize their "best practices" (and genetic material). Focused farmer-to-farmer visits could be more widely used to promote a greater exchange of views, problems and successes among farmers. The journées agricoles and a weekly radio program for farmers, for example, could be used to showcase successful farmer practices and research. An operational audio-visual facility could also be used to help farmers share their experiences.[44]

A policy of "putting farmers first" in the extension program suggests that the OHVN and IER will need to review and revise their research-extension protocol. In addition to measures which encourage a more focused and adaptive program, a revised protocol might include specific provisions to assure that both IER and OHVN begin to tap indigenous technical knowledge and the experiences with participatory technology development (PTD). A PTD approach would encourage greater direct involvement of the DRSPR in the OHVN extension program and also permit the subject-matter specialists to use their technical skills more effectively in the development of new technical material.

Materials and Methodologies

The subject-matter specialists could take a more active approach to tapping into NGO, international networks and other organizations for new technical information and extension methods. Much of the information often requires only minor adaptations in order to be presented to farmers (e.g. see the presentation on vetiver grass, NRC, 1993).

A concerted effort must be made to translate and widely distribute the existing, valid fiches into Bambara. Both the extension and literacy programs will benefit from the wider availability and additional opportunities to use these materials. Such an effort should help to improve the mutual contributions between the functional literacy and extension programs. Literacy program material could be developed from farmers' "best practices." Assisting farmers in preparing descriptions of these practices might be a central component of a post-literacy program and help to produce much needed post-literacy reading materi-

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[43] A review of incentives, pay scales and policies on motorcycle maintenance and gasoline may be warranted.

[44] Audio-visual methods have been successfully used in agricultural extension programs in Niger.

al. Participatory techniques to encourage a critical review and adaptation of the existing fiches could also constitute a valuable post-literacy activity.

A revised technical program with greater relevance for farmers should help to improve the effectiveness of the GVs. Attention will need to be given, however, to redefining the extension responsibilities of the animateurs and the conditions of their relationship with both the GVs and the AVs.

Agricultural Equipment Supply and Credit

The opportunity for farmers and village associations to purchase agricultural equipment and supplies from multiple sources, including the OHVN, private suppliers and non-governmental organizations, is one of the most significant recent changes throughout the OHVN zone.

Three banks, the BNDA, the BIAO and the BMCD are the most important sources of credit to village associations. During 1991-1992 these banks managed over 80% of the total annual volume of agricultural credit in the OHVN zone. As the role of the banks has grown, the OHVN has significantly reduced and reoriented its credit program. The OHVN now seeks to focus its credit program on short-term loans to individuals and loans to villages without an established AV. Most recently, some private firms have started to make direct sales of agricultural supplies on short-term credit to a very limited number of AVs.

The flow or distribution of credit by secteur varies widely. Farmers in the Gouani Secteur capture 40% of the total volume agricultural credit while only 16% of the credit flows to Kangaba Secteur farmers. Each of five other secteurs receives about 10% of the total annual credit. Farmers in the Boron Secteur do not have access to credit through either the banks or the OHVN.

OHVN loans to non-AV villages tend to be concentrated in the three secteurs of Koulikoro, Bancoumana and Dangassa. OHVN credit to individuals accounts for 100% of the total credit flows to farmers in the secteurs of Sirakorola and Banamba.

Loans for short-term, annual production needs for supplies and materials represent about 90% of the credit distributed throughout the zone. In addition to medium-term loan requests for equipment, the OHVN and the BNDA are the only two institutions that review loan applications for other economic activities such as household cattle fattening and cereals marketing.

Bank loan repayment rates for annual production credit average about 90%, or 20% higher than the repayment rate for medium-term credit. The almost 100% rate of repayment on loans through the OHVN is also quite significant, but includes repayments (about 25% of the amount due) that the OVHN collects by withholding cotton marketing rebates.

Loan repayment rates also vary widely by sector. Farmers in only one secteur exceed the 90% repayment rate. In four secteurs, farmers repay more than 70% of their loans, while those in another four secteurs are unable to meet 70% of their loan obligations.

Issues

Through its almost 50 warehouses, the OHVN continues to be a principal source of agricultural equipment and material throughout the OHVN zone. Based on requests received each year from farmers and AVs, the OHVN prepares and submits its equipment and supply orders according to the government's purchasing procedures.

Farmers and OHVN agents at all levels raise two critical problems with the OHVN equipment and supply system. First, government purchasing procedures frequently result in delayed and incomplete deliveries. Consequently, the OHVN often finds itself unable to fulfill equipment and supply requests, or is unable to fulfill them in a timely manner. Not only does this compromise the credibility of the OHVN as a development service to farmers, but it can seriously jeopardize farmers' production plans.

Second, the prices for OHVN equipment and supplies significantly exceed those paid by farmers working with the CMDT, or those of some private firms. As a public agency subject to the conditions of the Agricultural Sector Structural Adjustment Program, the OHVN does not qualify for import tax exemptions and cannot offer supplies and equipment at subsidized prices.

Alternative sources of supply, through private firms or NGOs, raise other important issues that put OHVN farmers at risk. Like the OHVN, private firms frequently cannot assure timely deliveries. More important, the firms commonly sacrifice quality for price, or in the case of some NGOs, for easy credit terms. The consequences for farmers can be devastating, especially when the late delivery of inappropriate (and cheaper) supplies (e.g., the wrong fertilizer) precludes farmers from finding suitable substitutes.

The overall "thin economy" throughout most of the OHVN zone raises a more serious long-term issue. As the Schéma Directeur observes: "Pour la distribution d'intrants et d'équipements et la fourniture de services, le principal problème est le manque d'enthousiasme des opérateurs,...que s'explique en partie par le risque élevé de ces opérations en zone sahélienne. .. Les volumes sont faibles voire localement nuls et les perspectives de marges commerciales peu attractives pour les opérateurs." (Schéma: 24)

Women are essentially excluded from the credit system. A small, experimental OHVN credit program for women's groups failed and most ONGs have not be able to meet women's needs for production credit. Moreover, as the November 1992 Sélingué Seminar concluded: "les besoins des femmes ne sont pas pris en compte par les AV." Furthermore, a credit policy for women may require some innovative approaches to rural credit in the OHVN zone. Group credit many not respond to women's needs. As Traoré (1991) found, women's familial responsibilities often preclude them from making the time commitment required for most group programs. Consequently, many women feel that some type of individual credit program more effectively responds to their immediate financial preoccupations.

The 1992 financial analysis (Waddell and Audette, 1992) identifies several important organizational and operational weaknesses which seriously threaten the viability of the OHVN equipment and credit program. First, the cost of maintaining several warehouses which handle a low volume of equipment, or which serve simply as supply points for a small number of AVs, may be too high. These costs may keep the OHVN from expanding its equipment and supply services to the large number of villages that are not yet served. Second, the report describes many fundamental accounting problems which not only

prevent useful program analyses, but also encourage "toutes les manipulations financières."

Options

The November 1992 Sélingué Seminar identified several operational steps that could be taken to improve the overall operation of the OHVN equipment and credit program (see Appendix C).

In addition, the Schéma Directeur identifies five specific steps for expanding the volume of credit available to villagers while assuring more uniformity in the credit conditions and procedures followed by ODRs, projects and ONGs. As the Schéma recognizes, "aucune formule ou institution de crédit ne peut prétendre offrir tous les produits financiers aux meilleures conditions. Par ailleurs la concurrence [temperé] est nécessaire..." (see Chapter 7, pages 190-195).

As suggested above, especially creative approaches may be required in order to make credit available to women. The Schéma Directeur certainly supports such initiatives in its call for "la création progressive d'une capacité diversifiée et adaptée d'intermédiation financière en mileau rural ainsi que la formation des bénéficiares à l'éthique du crédit" (190). The Grameen Bank model (recognized by the Schéma) may represent one type of initiative. As the AID-financed Gemini Project has found, "the promise of programs such as the Grameen Bank and its cousins is their ability to reach large numbers of people profitably .. [and] become permanent parts of the local financial system." (Rhyne, 1992-1993).

Finally, if the OHVN corrects many of the accounting problems in the credit program, then the Office could begin to use data on the use and distribution of credit to sharpen its overall development program. For example, it could be extremely useful to look at the relationship between the distribution of credit over time and the improved technical proficiency levels of farmers. More specific and accurate information about the distribution of credit at the village level would also help the OHVN examine how access to credit might need to be broadened to reach women and poorer households.

Agricultural Marketing

The 1992 Financial Analysis and the November Sélingué Seminar (Appendix C) review the principal issues related to the provision of marketing services by the OHVN to farmers. This section relies heavily on these two documents to summarize the principal findings and observations concerning the OHVN role in cash and food crop marketing.

Cash Crop Marketing

The CMDT national monopoly for cotton processing and sales fixes the conditions under which the OHVN guarantees cotton purchases throughout the zone. The OHVN price for cotton follows the national price policy set by the five year contract plan between the government and the CMDT. The delivery price received by the OHVN, on the other hand, is subject to annual negotiations between the OHVN and the CMDT. After three years of stable prices, in 1992-1993 the OHVN has had to accept both a 3% drop in its 1992-1993 delivery price and a much less favorable price formula for purchasing mixed quality cotton. These lower prices could represent losses of up to 40 million CFA for the OHVN during 1992-1993 (see Waddell and Audette, 1992: 28).

The OHVN also faces significantly reduced earnings as its role in tobacco marketing

becomes increasingly marginal. The quantity of tobacco purchased by the OHVN has declined over 60 percent since 1989-1990 while private deliveries to SONATAM have grown by 30 percent over roughly the same period.

The contribution of other crops to OHVN earnings remains equally uncertain. Sesame production, for example, initially represented a relatively promising cash crop opportunity for farmers in the OHVN northern sectors. The absence of a market outlets, however, does not allow the OHVN to guarantee purchases.

Cereals Marketing
The OHVN does not directly participate in cereals marketing. Its role is limited primarily to that of assisting villagers and AVs in resolving village-level storage problems and, through CLUSA, in preparing loan requests for marketing advances.

Issues

Cotton
The dependency of the OHVN upon the CMDT-controlled cotton market diminishes the effectiveness of OHVN services to villagers and village associations in at least two ways. First, the annual negotiations over the remuneration for OHVN cotton deliveries to the CMDT mills introduces considerable uncertainty into OHVN long-term budgeting and planning. Second, the OHVN cannot assure villagers prompt payment for their cotton. Based on estimated deliveries, the OHVN only receives a partial advance to cover some of the marketing costs. The OHVN does not have the operating funds to pay farmers directly, and the CMDT reimbursements to the OHVN for actual deliveries tend to be very slow. As a result, cotton payments to farmers are commonly delayed. Farmers and field agents report that these delays frequently make it difficult for farmers to meet their loan obligations; this jeopardizes their credit standing with the banks and private suppliers and obviously affects the household cash flow.

Other Cash Crops
The OHVN confronts more than a marketing problem with tobacco. As outlined in the 1992 Financial Analysis, the Office faces a range of related production and investment issues. Tobacco prices do not make an expansion of irrigated tobacco production attractive to farmers and the profitability of rainfed production remains questionable. Furthermore, the limited domestic and export market for the Paraguay variety, which is the only variety raised in the OHVN zone, does not warrant any expansion of production.

The initial experiences with sesame suggest that marketing is the main problem posed by this crop. Sesame does not appear to create serious production problems. Subject to a guaranteed market, farmers in the more semi-arid areas appear quite interested in the cash crop potential of sesame.

Cereals
Efforts by villagers and AVs to improve their earnings from cereals marketing face a series of economic and management problems. The banks and private suppliers do not provide production credit for cereals. As a result, most farmers throughout most of the northern sectors have little or no investment capital to expand cereals production. When cereals surpluses are available, on the other hand, either the AVs tend to be slow in submitting their requests for marketing advances, or the advances are not delivered in a timely manner.

In addition, as the Schéma Directeur suggests, high transport costs, and those associated with the structure and organization of cereals marketing, make it difficult to improve producer prices and earnings.

Options

In order to gain greater control over its markets, and improve incentives for farmers, the OHVN proposes the establishment of a new Division for Marketing, Credit, Supply and Transportation. The financial uncertainties identified in the 1992 Financial Analysis raise several questions about the institutional viability of the OHVN. Given these questions, it will be important to weigh the advantages of investing in such a new division against those measures which more directly and immediately strengthen the capacities of villagers and village associations.

The 1992 Financial Analysis recommends that the OHVN use a protocol agreement with the CMDT as a means to secure a guaranteed delivery price over a fixed period of years. In the face of a highly uncertain world cotton market, and without some type of subsidy, however, it will be difficult for the CMDT to agree to such a condition.

Similarly, an OHVN-SONATAM protocol would only begin to resolve some of the marketing problems related to tobacco. As noted in the 1992 Financial Analysis, some of the more important issues may be related to the economics and diversification of tobacco production.

NCBA/CLUSA

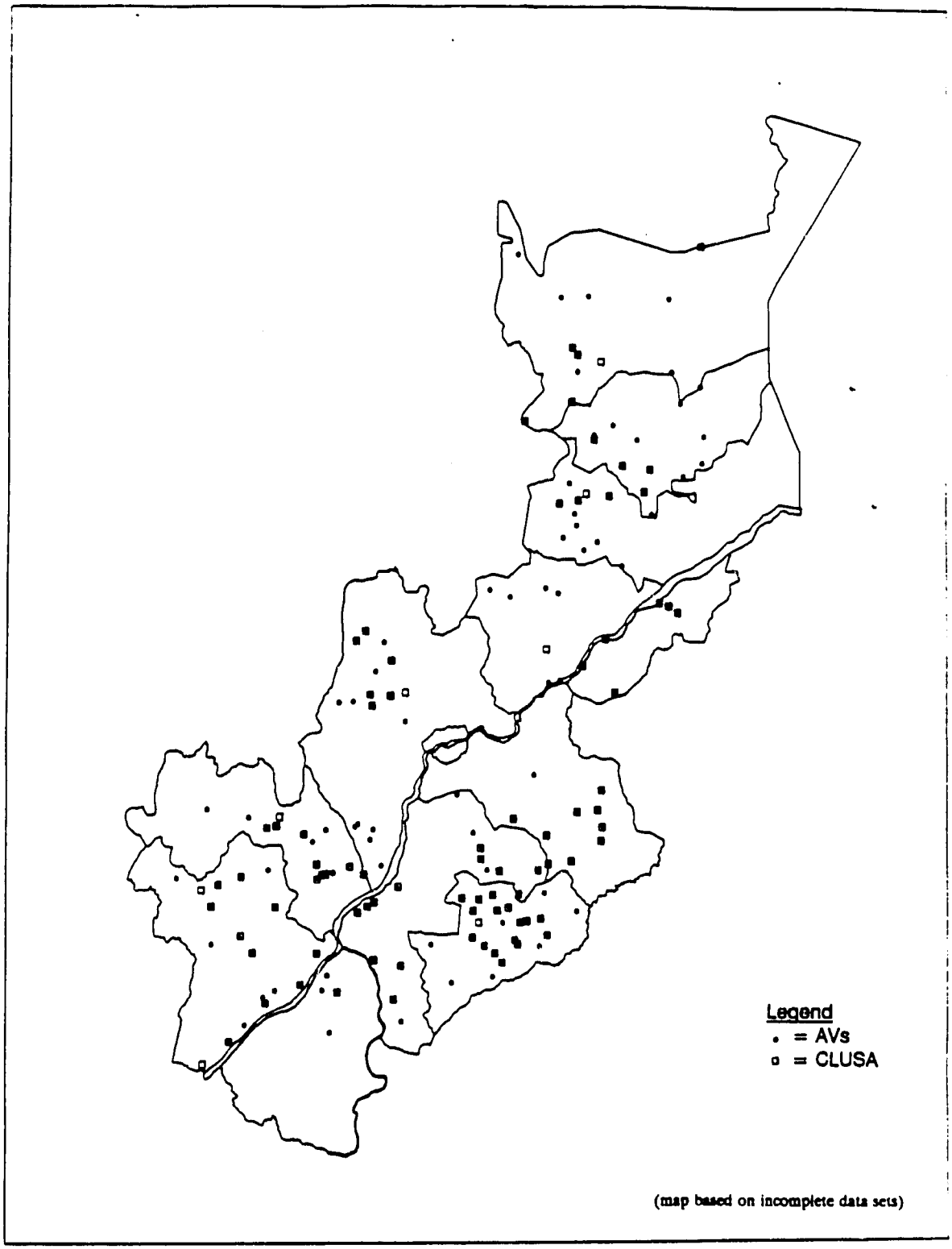
The NCBA/CLUSA Operational Program Grant under the DHV Project is designed to help strengthen and create new associations villageoises (AVs) which are self-directing, well-managed and financially viable. In order to achieve this goal, the CLUSA program assists AVs to implement a variety of agricultural, economic and social activities that promote the well-being of their members (USAID, 1988).

Starting with only 15 AVs in 1989, a small headquarters staff and 25 village-level trainers had expanded the program by 1992 to 142 AVs and almost 40 Groupements in all 10 Secteurs. The percentage of AVs and Groupements assisted by the CLUSA program, however, varies widely by secteur. In the southern secteurs of Gouani, Ouélésébougou and Bancoumana, where CLUSA has been working since 1989, coverage varies respectively from nearly 100 percent to 70 percent of the existing AVs and Groupements. In several other secteurs (Kangaba, Dangassa, Koulikoro and Kati), CLUSA assists about 50% of the existing AVs and Groupements. CLUSA started to work in the northern secteurs (Boron, Banamba and Sirakorola) in 1991, and about 10% of the existing AVs and Groupements are covered in these secteurs.

Over 5,000 AV members and almost 2,000 village AV leaders, including only a handful of women (20+), have received basic cooperative management, or more specialized business training through the CLUSA program. This training, and specifically instruction in the preparation and presentation of credit requests, is directly responsible for the phenomenal success in the privatization of agricultural and small business credit. Each year an increasing number of AVs negotiate production credit loans directly with banks. Based on their acquired skills and experience, over 50 AVs are able to secure seasonal credit for insecticides directly from private suppliers. Based on the confidence of the banks in the improved management capacity of the AVs, it is estimated that the volume of credit in

1992 was equal to the total volume of credit allocated since the beginning of CLUSA's program of assistance (CLUSA, 1992).

MAP 3.
Distribution of Village Associations and CLUSA-suppored Activities



Almost 75% of the CLUSA training and assistance focuses on helping villagers to obtain and manage bank loans for seasonal agricultural production supplies (fertilizer,insecticides, etc.), equipment, cereals marketing and cattle fattening. Training is also provided to help villagers obtain loans for, and manage longer-term activities such as village stores, grain processing mills and pharmacies. As CLUSA notes, however, "les activités permanentes ne sont pas très sollicitées dans les AV."

Issues

The success of CLUSA's training and support, and the continued contribution of this approach to development throughout the OHVN zone, highlights the importance of literacy and numeracy skills for successful village-based development activities. As the "CLUSA Approach to Cooperative Development in Africa" notes, "without the ability to read, write, and perform basic mathematical calculations .. co-ops .. will be unable to make informed decisions on their own behalf. .. The approach is to tie the literacy/numeracy training directly to whatever economic activity has been chosen" (NCBA, 1990). As discussed below, however, considerable work could be done to assure that CLUSA and DNAFLA training activities are more closely associated.

In the last three years, the AVs supported by CLUSA have mobilized 88% of the production credit obtained from the banks. As CLUSA concludes, "l'activité d'approvisionnement en intrants est présentement maîtrisée par les villageois. Elle represente l'activité pour laquelle les AV ne sollicitent pas beaucoup d'assistance." The exceptional success of this part of the CLUSA program, however, threatens to divert attention from more difficult issues that revolve around the more advanced training and the types of support that are required to sustain longer term activities such as small stores or pharmacies. As identified by CLUSA, these longer term activities raise a fundamental organizational dilemma: the effective management of a store or pharmacy, for example, requires frequent management meetings; at the same time, these types of activities are difficult to manage through groups.

Options

A continuation and expansion of the type of business management and organizational skills training provided by CLUSA is essential to achieving the overall development goals outlined in the Schéma Directeur du Secteur Développement Rural. As outlined in the Schéma, several different types of training for several different groups will be required.

The intensification of agricultural production will require "la responsabilisation des producteurs en les formant et les informant de manière à ce qu'ils puissent faire des choix conscients.." This type of training could continue to be provided to village groups under the auspices of an ODR like the OHVN, or a government office like the DNA-COOP. In addition, it would be useful to examine how CLUSA might be able to play a more direct role in revitalizing functional literacy, and specifically in the design of more advanced reading materials that would help to continue to strengthen villagers' small business management skills (see discussion below).

The Schéma outlines an equally challenging business and management training opportunity for "des opérateurs non-paysans intervenant dans le développement rural," including suppliers, artisans and other service contractors. Such training will be critical to continued efforts to strengthen and promote the role of the private sector, and especially the contribution of agribusiness, in rural development. As the Schéma notes however, the "relative absence de motivation de certains des opérateurs concernés pour ce type de formation"

may be a major hurdle. "Certains estiment en outre que la tenue de documents comptables, la clarté dans les opérations commerciales, ne peuvent présenter d'intérêt que pour le fisc ou les services de contrôle des fraudes, mais n'en ont aucun pour l'opérateur."

At least two institutions should be examined as possible channels through which business and management training, perhaps with technical assistance from CLUSA, could be offered. The Chamber of Agriculture represents one possibility. One of its central objectives is to promote professional training in the rural sector, and representatives of the Chamber have participated in a "training of trainers" program in agribusiness organized by the Bordeaux International School. As the Schéma Directeur notes, the Chamber "doit .. jouer un rôle majeur dans la promotion des organisations professionnelles du Secteur Rural .. ce qu'elle a, d'ailleurs, déjà commencé à faire."

The other possible channel might be through Groupements d'Intérêt Economique (GIE) which have been supported under the Ministry of Finance. If the policy goals for GIEs in Mali are similar to those in Senegal, for example, the GIEs might represent an excellent opportunity to achieve what the Schéma Directeur has called "l'adaptation des fonctions de l'Etat et la Promotion du Secteur Privé."[45] Relatively flexible administrative and juridical regulations in Senegal facilitate the establishment of self-managing private groups which also have relatively easy access to private credit.[46] As a result, GIEs in Senegal have considerable management and financial freedom. Two or more individuals can establish a GIE. Investment capital is not required and and profits from economic activities are shared by the members. The promotion of GIEs, and the use of such groups, to offer more widespread agribusiness and management training, could be an effective way to improve the delivery of rural development services throughout the OHVN zone.

Functional Literacy

The OHVN promotes functional literacy as a pivotal element for rural development and "développement autocentré et de promotion paysanne autogérée" throughout the zone. Reading and numeracy skills are considered as essential elements for the technical and professional training which allows villagers to organize, conceive and implement their own development programs. The acquisition of these skills also permits the gradual transfer of responsibilities from government agricultural agents to villagers.

The first functional literacy centers in the OHV zone opened in 1975-1976 with support from the Canadian Agency for International Development. In 1978, the first USAID project to support the OHVN financed an important expansion of this program and involved plans for opening 100 centers. The second USAID project, signed in late 1988, also provided financial support for functional literacy, including the continuation of an implementation contract between the OHVN and the National Functional Literacy Office (DNAFLA).

By late 1992 the OHVN had opened more than 500 functional literacy centers, of which 65% were for men and 20% were for women; mixed centers comprise the balance. Women constitute over 20% of the neo-literates and just over 10% of the village literacy teachers

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[45] GIEs are not discussed in either the Etats Généraux or the Schéma Directeur.

[46] A similar issue may need to be examined in Mali as well. The Schéma Directeur, for example, discusses the lourdeur of administrative regulations concerning the establishment of associations villageoises in Mali.

(animatrices).

Equally important, the OHVN reports that the success of the functional literacy program has permitted the gradual transfer of more development responsibilities to villagers. The number of auto-encadré villages continues to grow, along with the number of available animateurs, who, according to the OHVN, provide "un apport inestimable dans les activité de formation et de demonstration." These animateurs, many of whom are graduates of the OHVN functional literacy program, play key management roles in the AVs and help to reduce the number of activities for which field agents are responsible.

In principle, functional literacy centers hold one to three hour classes in the evenings from two to five days a week during the dry season. In order to accomodate both the animateurs and participants who seek employment or engage in nonagricultural economic activities outside the village during the dry season, the OHVN has experimented with 45 and 50-60 day intensive literacy programs.

Villages draw upon three sources of support for their centers: the OHVN/DNAFLA; NGOs; and villager contributions. NGOs, which support about 20% of the centers, help to finance the construction and operating costs of many centers. Village-supported centers are financed most commonly with the earnings from a collective field.

Most participants in the functional literacy tend to young. In 1991-1991, almost 50% of the attendees were from 10 to 20 years old.

Issues

Literacy Levels

The OHVN reports that there are over 13,000 neo-literates, or graduates from the functional literacy program. Yet village-level studies for some time have identified the shortage of neo-literates as one of the program's serious weaknesses. In 1986, McCorkle and Kamité found that the widespread lack of literacy skills was one of the biggest obstacles to the success of village associations. More recently, an early 1992 CLUSA report recommended that: "un effort doit être fait pour relever le niveau d'acquisition des connaissances en alphabétisation afin d'élargir le nombre de néo-alphabètes compétents.." (CLUSA, 1992).

Literacy Materials

Most village literacy centers throughout the zone have an adequate supply of first phase training materials. For several years, however, the annual OHVN-DNAFLA-USAID evaluations have noted that the more advanced students, and especially the neo-literate villagers, quickly become disinterested in the basic material. Moreover, the so-called libraries linked with the centers do not respond effectively to the interests and needs of neo-literate villagers. As the 1991 joint functional literacy evaluation team reported: "..les auditeurs et les animateurs réclament beaucoup de thèmes de la post-alphabétisation .. ils voudraient surtout des documents de post-alphabétisation sur les techniques agricoles recommandées par l'OHV..."[47]

In a partial response to this problem, CLUSA organized a program in 1990 with DNAFLA to introduce functional literacy training that was directly related to the some of

[47] This is not a new problem. In 1986, McCorkle and Kamité reported that farmers requested a more systematic translation of OHV documents.

the economic activities of the AVs. By early 1992, CLUSA estimates that about 1,500 AV decision-makers had received this training.

Intensive Courses
Intensive literacy courses appear to be a relatively successful way to train a significant number of neo-literates in a short period of time. These programs, however, raise several critical operational issues. In contrast to the regular courses, an intensive program requires some means for compensating the teaching staff who are unable to carry out any other responsibilities during the training period. The experimental intensive programs confronted three additional problems: an inadquate supply of teaching material; continued irregular attendance; and an inadequate number of participants.

Women and Functional Literacy
Everyone notes the importance of literacy and numeracy training for women, but after almost 20 years, the OHVN remains far from integrating women into the functional literacy program. Despite the recognized advantages of literacy, women's literacy training continues to confront several types of problems including: spousal resistance; the pressure of multiple household responsibilities; the appeal of other economic opportunities, such as gold-digging; lack of motivation; inadequate numbers of trained women instructors; absence of appropriate teaching material.

As Traoré (1991) reported, fewer than 10% of the women neo-literates participate in the annual training programs for literacy teachers, and their participation remains limited to "women's topics." According to Traoré this is an important factor which marginalizes women in the program and erodes their motivation to participate.

Despite these serious problems, Traoré notes that women have "une volonté réelle .. à savoir lire, écrire et calculer" and that as evidence of this, the earnings from womens' collective activities support 12 of the 101 women's centers. Nevertheless, as Traoré concludes, "les besoins des femmes dans le domaine de l'alphabétisation fonctionnelle dépassent les possibilités offertes par le projet DHV." (1991: 16)

DNAFLA-OHVN
Staffing under the OHVN-DNAFLA contract includes a coordinator, a women associate and the heads of 10 functional literacy zones (Chefs de ZAF). Traoré (1992) reports the "démotivation" of the Chefs de ZAF that appears to be linked to the lack of clearly defined and confusing reporting relationships between DNAFLA and OHVN. Moreover, the 1991 institutional analysis of the literacy program noted that neither the Chefs Secteurs nor the Chefs de ZAF are familiar with the terms and conditions of the OHVN-DNAFLA contract.

Literacy in the OHVN Program
Despite the stated importance of literacy training to the success of the OHVN rural development program, literacy training takes a back seat in OHVN day-to-day operations. The Chefs Secteurs rarely visit the literacy centers, and as reported in a 1991 OVH Monitoring Office survey, very few of the field agents have "la moindre information sur les centres se trouvant dans leurs zones respectives."

The 1990-1991 joint OHVN-DNAFLA-USAID evaluation report summarizes the issue: "La plupart des agents d'encadrement agricole n'ont pas encore compris .. que .. l'action de vulgarisation et l'action d'alphabétisation sont comme les deux faces d'une médaille. L'une ne peut aller sans l'autre. L'alphabétisation prépare le champ de la vulgarisation."

Options

Since 1988, numerous reports and studies of the functional literacy program have identified concrete, reasonable and constructive means to improve the program and respond more directly to villagers' interests. Some of the most immediate and important requirements include: increasing the availability of reading materials; developing materials for neo-literates; translating and widely distributing the OHVN technical agricultural materials; finding ways to respond to women's needs for literacy and numeracy training; assuring that OHVN personnel can read and write Bambara.

In summary: The need, opportunity and responsibility to prepare, develop and distribute massive amounts of reading material in Bambara (and other languages) may be the most significant option to emerge from this overview of the literacy program.

These recommendations are not new. Consequently, ways in which to improve the impact of literacy on development in the OHVN zone must be urgently considered.

Travaux Neufs Roads

Under an OHVN contract financed through the DHV Project, the Brigade Pistes Agricoles OHV built about 150 kilometers of rural roads from 1988 through 1992. This represents just over 50% of the 285 kilometers of roads which were originally planned for construction.[48] Villagers and village groups readily note how these roads successfully improve the availability of a broad range of economic and social goods and services. The roads unquestionably enhance villagers' access to social services and economic opportunities outside the village as much as they open the village to more commercial trade and development activities.

Issues

Maintenance

The formulation and implementation of an effective rural roads maintenance program continues to be a major issue for the OHVN. The 1988 DHV Project Paper signaled the need to address road maintenance as a means to protect the investment in construction. Four years later, at the 1992 Sélingué Seminar, the OHVN reported the weak involvement of villagers in road maintenance and the difficulties raised by the "degradation intensive des pistes par les transporteurs privés."

Contract Objectives

A 1992 audit of the rural roads contract apparently reported that about 60% of the contract funds had been used to achieve about 30% of the road construction and maintenance objectives. Given the critical significance of improved rural roads to development throughout the OHVN zone, such a finding raises serious questions about the most appropriate mechanism(s) to build and maintain rural roads in the OHVN zone.

Options

The Schéma Directeur identifies rural road construction and désenclavement as one of the key features of the government's economic reform program. In addition to the contribution which roads can make to villagers' social well-being, the Schéma emphasizes that

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[48] About 400 kilometers of rural roads were constructed prior to 1988. The project plans to construct another 400 kilometers were revised in order to reallocate funds for road maintenance.

improved roads could help to cut marketing transport costs and thereby increase the possibilities of offering villagers higher prices for their agricultural products.

The Schéma also recognizes that rural road maintenance must be a key part of the government's decentralization program. In each local investment plan, "le développement et l'entretien des infrastructures locales de base doit passer avant toutes choses.." (197)

In addition to providing financial assistance, donor agencies might be able to help the government fulfill its commitment to rural road construction and maintenance in at least two ways. First, given the continued difficulties and the high costs associated with road maintenance, it might be useful to help the government identify how other countries in the Sahel, and elsewhere, have handled rural roads construction and village-level maintenance. As the Schéma recognizes, some compromise must be forged that allows decentralized governmental units to identify their own investment budgets while responding to the national priority for improved rural infrastructure.

Second, the role of an intermediary agency, such as the OHVN, in the formulation and implementation of a rural roads program deserves examination. Even if the findings of the rural roads audit report are modified, it is clear that the OHVN has not effectively monitored contract performance. Similarly, a feasibility study of the use of private construction firms might identify some interesting program options that help to employ villagers in both construction and maintenance.

Other Affiliated Programs

Several national agencies and projects carry-out their activities in collaboration with the OHVN. The most important affiliated programs include the FAO Seed Multiplication Program, the Peace Corps, the German-financed Agroecology Project and the Pilot Agrometeorological Project (Agrométéo).

FAO Seed Multiplication

The FAO Seed Multiplication Program promotes the decentralization of seed multiplication as a means to improve farmers' access to new crop varieties. Under this program, participating farmers in six villages produce improved local varieties of cereals and cowpeas for sale at a guaranteed price. In each village, an eight-member management committee (Cellule Semencier) oversees the multiplication and distribution activities for the producers.[49] With some logistic support from the program, OHVN agents assist in the distribution of seed.

The program offers participating farmers credit to cover the production costs of seeds, fertilizer, and insecticides. The AVs are provided credit to purchase the seed, sacks and insecticides for storage, and a thresher and oxen cart. In addition, the Program provides the funds and materials to build a warehouse for seed storage.

Agrométéo

The objective of the pilot Agrométéo program is to help farmers increase agricultural production by improving their ability to make better planting decisions based on 30 years of locally collected rainfall and yield data. If farmers follow project recommendations they have an 80 percent probability of harvesting a crop.

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[49] This committee is generally comprised of the AV bureau members.

Starting about 10 years ago with 16 farmers, or paysans observateurs, in 4 villages in the Bancoumana Secteur, the program now involves 84 farmers throughout the OHVN zone. Each paysan observateur records daily rainfall and delivers this information to the OHVN secteur offices every 10 days for transmission to Bamako via program-supplied radios. The project also collects planting and yield information on sorghum, millet and maize production from almost 950 farmers who belong to Agrométéo contact "groups" in villages throughout the zone. Fifty-five of the paysan observateurs received bicycles from the project to facilitate the delivery of data to the OHVN secteur offices (D.N. Météorolgie, 1992).

Peace Corps

As part of the Africa Food System Initiative (AFSI), Peace Corps/Mali posts "teams" of volunteers composed of specialists in education, water, agriculture, natural resource management, and small enterprise development. The agriculture, water and natural resource management members of these teams are assigned to work with the OHVN.[50]

DED Agroecology Project

The German-financed (DED) Agroecology Project manages a series of farmer-assisted trials in five villages in the Ouélésébougou secteur. In each village, project staff work with farmer groups (four person équipe technique) on expanding the use of soil and tree conversation techniques. Project staff also carry-out other trials, such as direct seeding of various tree species and the use of neem extracts as a pesticide on cereal and cotton crops.

In support of the OHVN program on natural resource management, DED has provided in-service training for the Ouélésébougou chefs sous-secteurs in the use of GRAAP (Groupe de Recherche d'Action et d'Appui à l'Auto-Promotion) community resource management techniques. The DED and OHVN are discussing the possibility of extending the agroecology project to the entire OHVN zone.

Issues

The contribution of the Seed Multiplication Project to increasing farmers' access to improved seed appears mixed. It is reported that the sale of seed has fallen short of expectations. Many villages, for example, are apparently using the seeds and warehouses as community cereals banks. In addition, farmer interest in producing some of the improved varieties has declined after the first year. More important, evidence suggests that the availability of project credit may be creating an additional debt burden on participating AVs and farmers.

Peace Corps Volunteers report very ineffective and unsatisfactory working relationships with the OHVN. It is not clear whether Peace Corps/Mali and the OHVN have reviewed and examined their respective assumptions about the role and responsibilities of volunteers in the OHVN zone.

OHVN field agents in the Ouélésébougou sector who received the GRAAP training have not applied this training in the identification of natural resource problems with their villages. This may be due in part to difficulties in incorporating the GRAAP approach into the T&V calendar. It may also reflect the field agents' reluctance to become involved in an activity which is not encouraged by the OHVN.

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[50] Volunteers previously helped with the CLUSA training program for the AVs.

Other Agencies and Programs

Non-Governmental Organizations

From 20 to 30 national and international non-governmental organizations (NGOs) carry-out a wide variety of economic and social service programs throughout the OHVN zone. Neither the private NGO Coordinating Committee (CCA/ONG) nor the government's Cellule de Suivi des ONGs maintain accurate and complete records of the NGOs or their programs.

As discussed above, several NGOs contribute directly to the delivery of OHVN functional literacy services. Many more NGOs engage in a wide range of development activities which supplement, but are not an integral part of the overall OHVN program. Most of the NGO programs deal with quality-of-life concerns and can be classified into two broad types of projects. NGO projects which focus on improvements to village infrastructure usually depend upon the contributed labor and/or financial donation from villagers in the construction of: village wells and water supply, including the introduction of solar-powered pumps; the construction of health units, maternities, primary school rooms and functional literacy centers; and, the construction or improvement of small-scale irrigation and water-control facilities.

A second group of projects address an extremely diverse range of small-scale economic activities. These projects, which may also involve some type of labor and/or financial contribution from villagers, include, among others: the establishment of cereals banks; the promotion of woodlots: assistance to improve beekeeping practices; small gardening and fruit tree programs; and, the introduction of animal traction. Several NGOs also focus their support on womens' small-scale economic activities.

Most NGO programs are quite popular among villagers, but it is unclear whether these programs are launched primarily in response to development fads or village needs. For example, despite questions concerning the financial viability of village cereals mills, many NGOs help villages to install mills in response to the widespread concern to reduce women's labor time and offer more income-generating opportunities. On the other hand, shea butter presses and improved soap-making practices are clearly viable economically and attractive to village women.

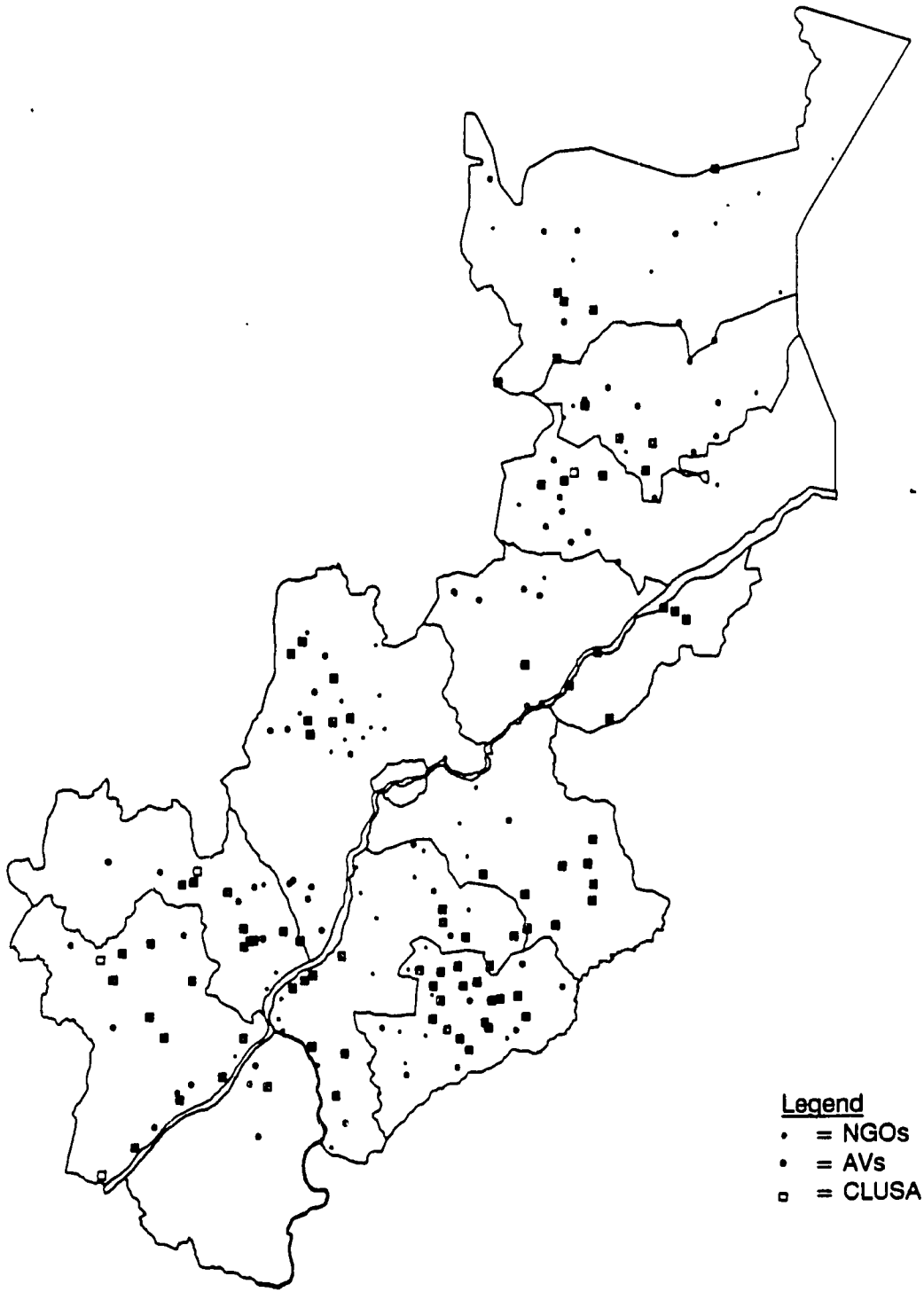
At the same time, some NGO programs do offer villagers opportunities for growth and development beyond the specific NGO activity. Training, like that offered by AFRICARE in support of its small ruminants project, or by the CFAR in Ouélésébougou, for example, enables its direct beneficiaries to use the training long after the end of a project. Similarly, some activities empower villagers to organize independent of a government program and thereby take better advantage of government-sponsored programs. For example, based upon the lessons learned in managing their cereals mill, the women in one village prepared proposals for additional, small-scale development projects.

Issues

Development Coordination

At one time, an OHVN coordinator had responsibility to follow and review closer links between ONG and OHVN activities. The Section Coordination ONG was disbanded as part of the restructuring process and the OHVN monthly program meetings rarely discuss issues related to OHVN-ONG coordinate programming. Most OHVN-ONG coordination seems to occur on a relatively ad hoc basis. In the Ouélésébougou Secteur the NGOs, the OHVN and representatives from other development projects meet twice a year to review

MAP 4.
Distribution of Village Associations, CLUSA-supported Activities and NGO Interventions



(map based on incomplete data sets)

their respective programs and plans. This appears to be the only secteur in which these Partenaires au Développement meet.

It is widely assumed that NGO programs can help to spread development benefits beyond the areas which can be reached by government programs. The absence of accurate and current information about NGO activities makes such an assessment in the OHVN zone difficult. The overlap of "NGO villages" with OHVN villages suggests, however, that villagers in the OHVN zone do not benefit from such a spread effect (see Appendix Map).

Moreover, the absence of an accurate and complete database on NGO programs suggests a lack of information exchange and program coordination among NGOs.

Grassroots Participation

Most observers agree that some NGOs have a comparative advantage over governmental services for working at the grassroots, or village level. Recent experiences with several NGO programs in the OHVN zone, however, raise serious questions about the responsiveness of these programs to villager needs and about their effectiveness in promoting local institutional development. There is some concern that the NGOs commonly present villagers with a pre-determined development program which responds to village needs, but is not necessarily driven by village priorities. As the farmer group representatives at the November 1992 Sélingué Seminar noted, each NGO tends to offer villagers its own "development package" which usually requires some form of "participation" or "commitment" from the village. One organization, for example, offered a village wells program on the condition that villagers would contribute 120,000 CFA.

Confronted with such opportunities to improve the well-being of the village, villagers may find it difficult to refuse the NGO offers, even though they may be unable to meet their counterpart commitment. Similarly, as CLUSA representatives have noted for several years, villagers find the soft, or "distributive" credit policies of most NGO programs very attractive until they confront the need to meet several loan repayments (to the NGOs and the banks) at the same time.

Options

As other studies on the role of NGOs in local development observe, the effectiveness of NGOs in promoting local development may be enhanced by working more closely with national programs and agencies (see Carroll, 1992). Thus, it might be useful for the OHVN to lead a collaborative OHVN-NGO review on the establishment of an OHVNNGO "development partnership" for villages throughout the OHVN zone.

Such a review could address at least two critical questions. First, how can NGO programs be designed and implemented (perhaps with some support from government agencies) to assure that they promote opportunities to establish village organizations for self-reliance and self-development (see Cernea, 1988)?

Second, how could the OHVN and NGOs collaborate in order to improve the responsiveness of the OHVN extension program to villager concerns? Are there innovative ways, for example, to incorporate NGOs into both the research-extension and equipment-credit programs (see Copestake, 1990; Bebbington and Farrington, 1992)? The challenge will be to find creative ways to adapt the OHVN programs to local opportunities while protecting and enhancing NGO freedom of action.

Projects and Government Agencies

This section briefly describes several governmental or government-related programs which are active in the OHVN zone. These programs may collaborate with OHVN field agents, but their activities are usually conceived and implemented independently of the OHVN.

Plant Protection

The SNPV (Service National de la Protection des Végétaux) operates primarily in response to severe attacks of migratory insects. With limited assistance from the OHVN and a system of village brigades, the SNPV has intervened in the Banamba and Boron secteurs to control grasshoppers and blister beetles.

The SNVP has responsibility for national plant protection policy, but its program tends to be driven largely by the availability of external funding for emergency pest control. In response, other agencies like the OHVN, the IER, and some private firms conduct their own plant protection and research activities to deal with non-migratory and chronic pest problems that trouble farmers throughout the OHVN zone. These agencies devote some time to the study or use of integrated pest management techniques (Kremer and Sidibé, 1991).[51]

Women's Training

The Centre Feminin d'Animation Rurale (CFAR) in Ouélésébougou supports a wide variety of small-scale women's projects primarily in the Ouélésébougou sector. The CFAR incorporates a training of trainers approach in most of its projects. Instead of simply soliciting support from village women, the CFAR trains volunteers to assume responsibility for implementing selected activities such as functional literacy or gardening. Moreover, CFAR emphasizes the functional contribution of its supported activities. For example, its functional literacy program is designed to help village women maintain birth records and the gardening program is designed specifically to help women fulfill their household responsibility to supply condiments.

Small-scale Development Projects

The small-scale development projects in the OHVN share several features. They base most of their activities on the identification of problems from various types of village reconnaissance surveys.[52] In addition, they all tend to offer some type of credit program and work with village animateurs and some type of village group.

With support from Canada, the Projet Micro-Réalisations through the Ministry of Plan supports village-level projects in the Banamba and Boron secteurs. In the Banamba secteur, the project maintains contact with the Forestry Service in its support of a village reforestation project. In the Boron sector, the project makes loans available for agricultural equipment and works with the Plant Protection Service (SNPV) to help villages respond to migratory pest infestations.

A FAO/Netherlands Local Forestry Project (Projet d'Aménagement Forestier de Banamba, PAFB) is completing the second phase of its work with 10 villages in the

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[51] Kremer and Sidibé (1991) report cases of pesticide poisoning from the inappropriate use of widely available free pesticides.

[52] It is not clear to what extent the results of these surveys determine the programs offered to villagers. In some cases it appears that the survey results are used to confirm pre-defined activities.

Banamba sector to promote the adoption of agro-forestry and village woodlot management practices. With support from the National Cooperative Service (CAC), the project offers loans to associations villageoises through a Fonds Villagoises de Développement to finance the purchase of seeds and the preparation of tree nurseries. The project also supports village functional literacy training with its own locally-recruited animateurs; DNAFLA trains these animateurs and provides the educational materials for this program. All project activities are run independent of any OHVN programs.

Another village forestry project, Projet d'Aménagement Forestier Villageois de Koulikoro, (PAFV), promotes anti-erosion measures and small reforestation efforts in the Koulikoro, Banamaba and Diofla Cercles.

An ILO/Norway project with the National Cooperative Service promotes the establishment of cooperatives in about 60 villages throughout the Kita, Koulikoro and Kangaba sectors. In addition to supporting functional literacy and cooperative management training, the project provides individual and group credit through the AVs for agricultural supplies and equipment and for cereals marketing.

Finally, an Italian-financed village water supply project requests villages to contribute 120,000 CFA toward the construction of a new village well.

Issues

There is little evidence that the comités de développement locales effectively help to assure that these various projects and the OHVN programs offer complementary services and help to expand the range of development benefits to villagers throughout the OHVN zone.

The loans offered to farmers and AVs by these projects, like those available from many NGO activities, tend to increase the villagers' debt burden. Most of the projects are unaware of the loans or loan conditions offered often to the same farmers or AVs by other projects. At the same time, villagers find the multiple sources of credit an easy way to meet their multiple needs for equipment and supplies. Many farmers, however, do not realize the cumulative implications of assuming several loans. Consequently, as the farmer representatives at the November 1992 Sélingué Seminar reported, farmers often feel confused and embarrassed when they are unable to meet their multiple loan repayments. More important, defaulted loans may jeopardize farmers' and AVs' credit rating with the banks. As a result, this may preclude villagers and AVs from continued participation in a project and thereby threaten the contribution of these projects to longer term development.

Options

As the government implements its decentralization policies, local development committees may be empowered to assure a broader spread effect among the various development projects. These committees could also recommend ways to implement more coordinated individual and group credit programs.

IV. ORGANIZATIONAL DYNAMICS

The Associations Villageoises

The establishment of over 250 Associations Villageoises (AVs) and village Groupements, through the collaborative efforts of the OHVN, CLUSA and DNAFLA, represents one of the most significant contributions in the last 10 years to village-level development throughout the OHVN zone. The AVs and, more recently, the Groupements have emerged as the principal actors in promoting greater private sector involvement in development. The AVs, for example, have been largely responsible for the flow of over 300 million CFA in credit to OHVN villages. As noted earlier, roughly one-half of these AVs are responsible for mobilizing almost 90% of the loan capital from banks during the last three years. Moreover, villages with AVs commonly attract development projects and opportunities from a variety of public and private agencies that are not affiliated with the OHVN program. As described in the 1988 DHV Project Paper, the AVs have become the "hub" for many development activities.

As stipulated in the 1988 law regulating the cooperative movement in Mali,[53] AVs are pre-cooperative organizations "à caractère transitoire dont la finalité est de se transformer en Ton Villageois." As "transition structures", the AVs

> "constituent des cellules primaries du mouvement coopératif en milieu rural, destinées à sensibiliser les populations sur l'aspect économique de leurs problèmes, à leur permettre l'apprentissage des principes et des méthodes de la coopération et à développer la confiance en soi par une ou plusiers réalisations concrètes assumées par elles-mêmes."

Similar to a Ton Villageois, each AV is governed by its members through the Assemblée Générale, and administered by a board, or bureau (officially the Conseil d'Administration), which is elected by the Assemblée Générale. Members of each village's founding families usually retain all the board positions in most AVs. In addition, 5 to 6 volunteer animateurs in each AV are responsible of managing and implementing most AV activities.

Animateurs are usually related to members of the AV board, and most are married. Only about 25% of them are school leavers and almost 60% have become eligible for their position, in part, through their participation in the village's functional literacy program. Approximately one-half of the animateurs have from 4 to 5 years of experience as animateurs, and almost 60% of them have been engaged at least once in some type of off-farm employment.

Membership in an AV is open to all village inhabitants who accept the AV's operating rules and regulations. In some cases, special requirements may be stipulated to encourage participation in AV activities. For example, several villages specify that all members must: participate in AV collective work or pay a penalty; help to achieve the objectives of the AV; attend the general meetings; and, show evidence of good standing ("faire preuve de

[53] Loi No. 88-62/AN-RM, Régissant le Mouvement Coopératif en République du Mali.

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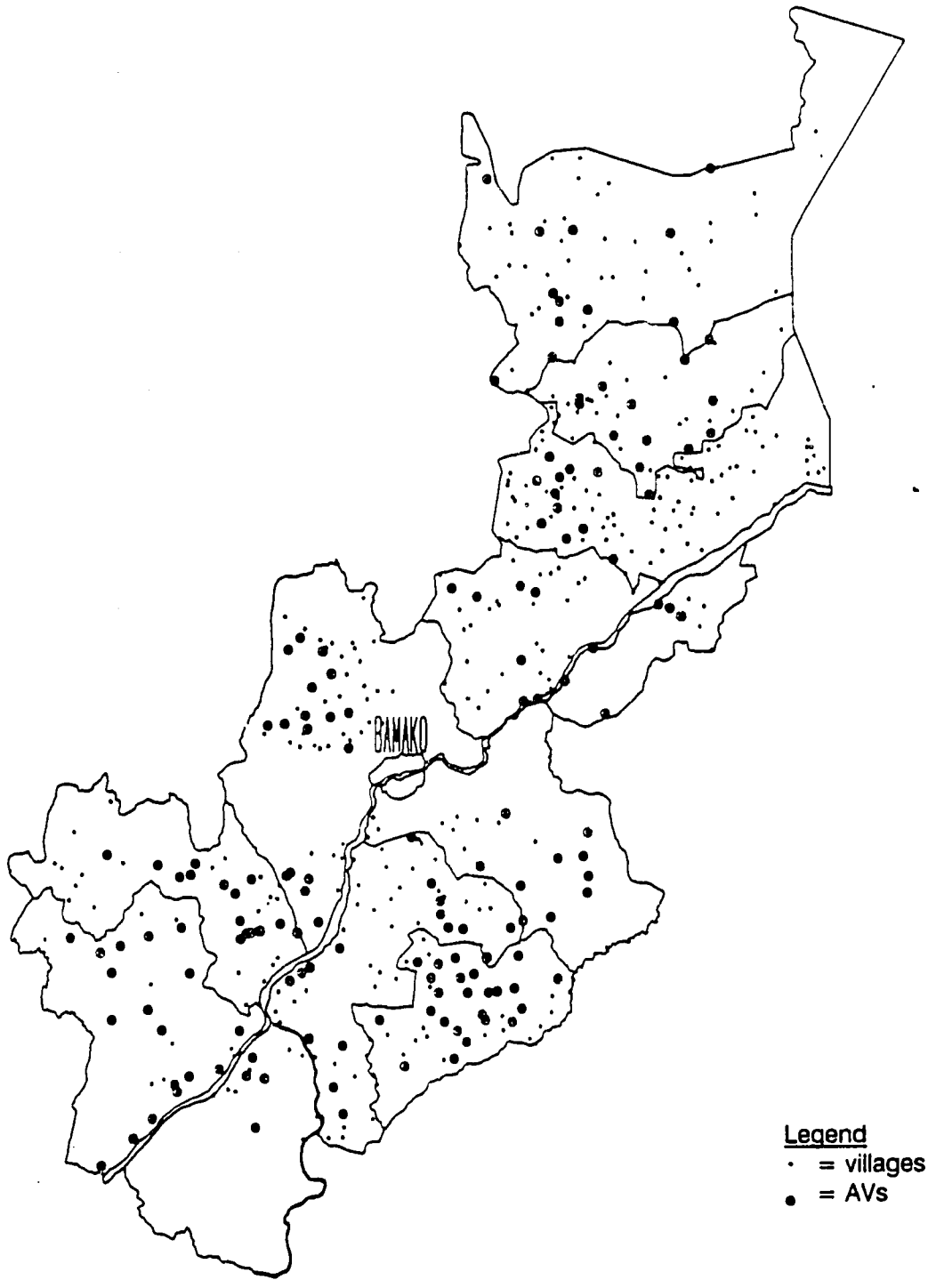
MAP 5.
Distribution of Villages and Village Associations in the OHVN Zone



(map based on incomplete data sets)

bonne conduite). Very few villages exclude women from AV membership.[54] Several AVs require payment of an entry fee and annual dues, but apparently few, if any, AVs enforce this requirement.

In addition to overseeing the village functional literacy center, village associations engage in a variety of collective economic activities. The earnings from one or more collective fields are a principal source of AV revenues. The OHVN rebate to an AV for its management of the village's cotton marketing is also an important revenue source. In some cases, villagers report that this rebate was a principal incentive for establishing a village association. In many AVs, as well, small groups of women are involved in several types of income-earning artisanal activities such as tie-dying, soap making, karité butter processing and grain processing with small diesel-powered mills.

Given Mali's orientation toward rural development since independence in 1960, villagers throughout the OHVN zone have considerable experience with village-level organizations. Villagers generally agree, however, that the AVs represent a new and significantly different opportunity from the government's previous cooperative policies and programs. Most important, villagers note that the AVs are not imposed; each village freely exercises the option to establish an AV.

It is widely recognized that some AVs have been able to accept responsibility for certain technical (44 of them for extension, or villages which are "auto-encadrés") and economic (credit management, input supply, agricultural marketing) activities that were previously controlled by the government through the OHVN. Villagers also point out the opportunities which an AV has offered in terms of acquiring certain management skills and/or obtaining credit. Finally, for some villages, the AV has been an opportunity to make collective investments, such as schools, maternities and dispensaries, bridges, dams and grain storage facilities, which villagers might otherwise not have undertaken.

Issues

Legal Standing

As noted in the Schéma Directeur du Secteur Développement Rural, very few AVs, after several years of operation, have requested recognition as a village cooperative or Ton under Malian law. The OHVN reports that no Tons have been established within the last 10 years. Most AVs, like those recognized by the OHVN or other government agencies, receive some type of administrative support and a financial guarantee from their government partner which, in the absence of legal standing, enables them to request bank loans. As long as the banks accept the loan guarantee from an AV's government partner, an AV has little incentive to apply for a change of status under Malian law. Consequently, there is some concern whether the current partnership between the AVs and their government agency offers a constructive basis upon which to build a greater role for the private sector in rural development. As summarized in the Schéma:

> "Il n'en demeure pas moins que le caractère "informel" de ces associations (l'absence de personnalité juridique) risque de poser problème au fur et à mesure de leur insertion accrue dans les relations marchandes. Tant que les AV avaient pour partenaire exclusif .. une ODR .. il n'y avait guère de danger. Il en est tout autrement lorsque se multiplient les partenaires:

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[54] In a brief survey of 10 AVs in 7 of the OHVN secteurs, one village, N'Koniko, was found to exclude women from AV membership.

> dans les relations commerciales, en cas de défaillance d'un fournissuer de l'association, ou d'un de ses acheteurs, ou de l'AV elle-même, quel recours peut-il y avoir, si l'AV n'a pas d'existence juridique?"

In addition, as noted in the Schéma, there is "la lourdeur des démarches administratives pour l'enregistrement et l'agrément des organisations de producteurs" which complicates the process of transforming an AV into a Ton.

The Schéma identifies similar hurdles to the creation of federations of AVs or "regroupements des organisations paysannes, qui devront permettre à la fois d'élargir les contacts permettant de choisir les opérateurs avec lesquels traiter, et d'obtenir des conditions plus favorables dans la négociation des prix."

Management Weaknesses

Very few of the AVs in the OHVN zone, including those supported by CLUSA, keep regular written records of their meetings or financial accounts of their economic activities. Based on a survey of about 100 AVs which had received CLUSA training, almost two-thirds of them do not keep management documents or maintain them incorrectly; a similar number either do not keep or have very irregular reports of their activities. This problem has existed for some time. In 1986, McCorkle and Kamité observed that the administrative dossiers, financial documents and other records were missing for many AVs. The occasional association which did keep records had its documents "scattered throughout the village in various officers' homes." (49-50)[55]

This problem does not reflect inadequate business management training. The problem is structural, and related, as the Schéma Directeur notes, to "une certaine ambiguïté dans la répartition des fonctions entre ces organisations à objectif économique et l'institution villageoise."(Schéma Directeur, Vol II: 32). The AVs have a "hybrid" character as both business units and village collectivities. The AVs manifest this hybrid character in several ways. As widely reported, the village's founding families occupy all of the board positions and some village leaders may hold more than one AV management position. Most animateurs are related to those on the AV board. Decisions concerning AV activities are commonly made outside the official AV general meetings and in the vestibule of the village chief. Village-based conflicts are commonly a source of paralysis for AV activities. As a result, the Schéma concludes, most AVs are not village-wide associations, but are intra-village groups which do not differ much from "les groupements traditionnels .. qui n'ont d'ailleurs pas disparu pour autant et coexistent avec ces formes plus modernes de coopération."

These conditions raise serious questions concerning the long-term contribution of AVs to rural development. They specifically raise questions about the ability of some AVs to maintain high loan repayment rates. As the Schéma notes, these high repayment rates may be illusory as they mask serious internal problems in debt recovery among AV members.

The Role of AV Animateurs

Mixed and conflicting interpretations concerning the role of animateurs have raised serious questions about the viability of their role in the AVs. Most animateurs are heads of families, and as a 1990 OHVN study found, their role as animateurs competes with their

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[55] Nor is this problem unique to the AVs in the OHVN zone. See Belloncle, 1990, for a similar discussion concerning AVs in the CMDT zone.

familial responsibilities. Villagers recognize the dilemma and, especially in those villages which receive a significant rebate from cotton marketing, animateurs receive some monetary compensation.

Nevertheless, considerable ambivalence surrounds the animateur position. The animateurs themselves hold widely conflicting views of their role. While some perceive themselves as being in service to their villages, others feel they are equivalent to unpaid (and thereby exploited) field agents of the OHVN. Villagers hold equally conflicting perceptions. The 1990 OHVN survey found villagers to be split between those who felt the animateurs were an effective link with the OHVN and those who felt that the position was simply one way to escape from field work.

Women in the AVs

Over one-half of the AVs supported by CLUSA include at least one women's economic activity. Women's groups within the AV, however, must negotiate for access to credit with the AV leadership. The limits on the annual credit line available to each AV means that the women's loan requests must compete with the overall request for production and equipment loans. The absence of women on AVs boards further weakens their role in negotiating for credit.

Options

The Schéma Directeur identifies several specific measures which could begin to address some of the above issues.

First, "il apparait opportun désormais d'offrir aux paysans le choix d'appartenir à des organisations intra-villageoises sans que les fonctions de ces organisations se confondent avec celles de la communauté..." (Schéma Directeur, Vol II: 41). This recommendation is based on the assumption that additional organizational options at the village level represent the best alternative for those villagers, including women, who are currently excluded from the "full" benefits of membership in the single AV.

The implementation of such a recommendation should be based upon a careful assessment of at least two critical components of the current program. First, a profile of the socio-economic structure and the organizational dynamics of the AVs needs to be prepared. The collection of information for this profile should be designed to help identify specifically, and confirm the need for, other types of village organizations that might be established. Second, in the absence of government legislation that grants legal standing to such "pre-cooperative groups," it will be necessary to identify the type of credit guarantees which banks would require for these new organizations.

In addition, the donor community could effectively assist the government to pursue several related recommendations in the Schéma, including: the identification of alternatives to, and the various implications of, granting legal standing to pre-cooperative groups; and, the identification alternative procedures to simplify the registration formalities for village groups.

Second, as the Schéma recommends, in order to create "un rapport de forces équilibré entre les producteurs et les autres opérateurs," certain provisions in the 1988 law on the cooperative movement must be urgently revised. Donors might examine how they might assist the government to undertake such revisions (see Schéma Directeur, Vol II: 42-43).

Third, the Schéma recommends renewed emphasis on the type of business management and accounting training which CLUSA has been successfully providing to AVs and Groupements. As the Schéma notes, training "dans les domaines de la gestion et de la comptabilité ... doit figurer parmi les critères de sélection des projets nouveaux dans le secteur." (Schéma Directeur, Vol II: 43)

Fourth, the Schéma suggests an insightful and step-by-step approach to the empowerment of women's organizations, and specifically, to the question of credit. Based on the recognized for a long-term effort to assure that "les droits des femmes à l'égal de ceux des hommes," the Schéma recommends several specific measures which could help to reduce the marginal role of women in economic development projects: renewed attention to the technical assistance needs of womens' associations; support to help village organizations find ways to assure more credit for womens' activities; and, the promotion of closer relations between women's groups and the Chamber of Agriculture.

Finally, villagers, OHVN agents and the animateurs have proposed several solutions to the "animateurs dilemma." The OHVN has discussed these proposals many times, but it has not yet taken action. A two-step approach is recommended. First, OHVN, in collaboration with a selected number of animateurs, should develop an action plan to deal with this dilemma. Second, in addition to reviewing and assessing the current proposals, the OHVN and the villagers should be encouraged to review how the model used by the Aga Khan Foundation in Pakistan might be applied to AVs in Mali. In this model, villagers must agree to compensate their representative, or animateur, as a condition for establishing and seeking official recognition of their association.

OHVN

In 1988, the OHVN began to restructure in conformance with the government's policy to transfer more responsibility for development activities to the rural population and to develop the role of the private sector in rural development. As a public agency with primary responsibility for rural development, the OHVN was required to restructure instead of fully privatize its activities. This restructuring involved measures to: reorganize the management system and structure; reduce the number of personnel; and, transfer commercial activities, such as input supply and marketing, to "collectivités organisées." In order to facilitate this process, the government converted the OHVN from a line government agency, or "opération," to a more financially and administratively independent "office," or "Etablissement Publique Adminstratif."[56]

This section briefly examines the progress of the OHVN toward restructuring, the issues raised concerning the OHVN proposed Contrat Plan, and the OHVN relationship with other governmental and non-governmental programs.

The government policy to restructure the OHVN and other ODRs cannot be reduced to a

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[56] The major lines for the reorganization of the country's ODRs were identified during the "Seminaire sur la Restructuration du Secteur ODR" held in May 1987. In addition to ODRs like the OHVN and 15 others which were classified as "organismes à gestion autonome," the government recognized three types of government services: a "sociéte mixtes," (e.g., the CMDT), an "établissement public à caractère industriel et commercial," (e.g., OPAM) and an "action" or "projet." See Loi No. 90-110/AN-RM Portant principes fondamentaux de la création, de l'organisation et du fonctionnement des Etablissements Publics à Caractère Administratif, 18 Octobre 1990. The government required that other agencies disengage from commercial activities or from any public investment activities that were the domaine of other public services.

simple policy of "diséngagement." Instead, the policy reflects the government's effort to respond to demands from the Etats Généraux for "moins d'Etat, mais aussi un Etat plus efficace." As the Schéma Directeur states, this policy involves the identification of "nouvelles responsabilités de l'Etat dans, précisément, l'aide à la responsabilisation de la société civile." The key is to find the most appropriate mix between the "investissements productifs" for the private sector and the "investissments publics" which continue to fall under the government's responsibility.

Within this broad policy context, the OHVN 7-point mission statement sets the goals for its activities throughout its zone of intervention. This mission is to: promote a better standard of living; increase incomes through improved and diversified agricultural production; improve health, education and living conditions; provide better natural resource management; remove transportation barriers; develop economic activities; and, transfer responsibility for development activities to villagers.

Villagers served by the OHVN and OHVN field staff throughout the zone recognize and accept the OHVN broad rural development agenda. Villagers, in particular, see the Office as their most important source for a broad range of financial and technical assistance. Most of the OHVN field staff who are responsible for agricultural extension, on the other hand, tend to focus on how the extension program contributes to the achievement of the overall OHVN mission.

A 1991 DHV evaluation report and the 1992 Financial Analysis of the OHVN (Waddell and Audette, 1992) confirm the significant progress by the OHVN in meeting its major restructuring goals. By 1992, the OHVN significantly reduced its personnel largely through the reorganization of the extension program and the transfer of credit and marketing responsibilities to AVs, banks and private suppliers. Through reorganization, the OHVN garage costs declined by 10% and private transporters handled more than 90% of the 1992 cotton and tobacco marketing. Many AVs negotiated equipment and supply purchases directly with private suppliers, and over 100 AVs had credit agreements with banks.

Issues

The OHVN Contrat-Plan

In most Francophone West African countries, a contract plan is an agreement between an independent government agency and the government that identifies mutual rights and obligations for a fixed period of time. Most contract plans stipulate performance criteria and identify government commitments, especially government economic policies, that would affect the achievement of the contract objectives. In Francophone Africa, contract plans offer a workable alternative to "heavy-handed government interference in public enterprises." They can help "to clarify goals and may lead to increased autonomy and greater efficiency.." (Saulniers, 1990).

The OHVN sees its contract plan, which has been under discussion throughout most of 1992, as a means to achieve a more secure and clearly identified level of financial autonomy and flexibility with the government. A late 1992 draft of the contract plan focuses on the issue of the OHVN statute and OHVN protocols and relations with the government, including government "sociétés." The draft does not identify OHVN performance goals or criteria by which the government could assess OHVN performance.

The OHVN draft contract plan makes a case for converting the OHVN from an administrative establishment (EPA) to a more commercially-based public establishment, as either

an industrial and commercial public enterprise (EPIC) or a mixed society ("société mixte" like the CMDT).

According to the OHVN, a continuation of its status as an EPA weakens its potential contribution to rural development in three ways. First, it increases the uncertainty of longer-term financial security by prolonging its dependence upon foreign aid projects. Second, EPA status prevents the OHVN from taking a more entrepreneurial approach to seeking working capital. Third, this status continues to subject OHVN management decisions to administrative procedures and criteria which are inappropriate for effective rural development programming. Consequently, at the end of the DHV Project, the OHVN feels that "le resultat de cette situation est une stagnation ou pire une déterioration progressive de la situation économique et financière" of the OHVN.

In contrast, the OHVN feels that it has the potential to operate profitably as a public commercial enterprise. With a commercial orientation, the OHVN could use its financial capital more creatively and employees could be better paid. Commercial status, for example, would allow a proposed OHVN Marketing Department more flexibility to promote OHVN goods and services. According to the OHVN, a change of status would give it the basis for taking full commercial advantage of its position around Bamako, the country's principal consumer center.

The OHVN proposal raises at least two serious issues concerning the continued delivery of rural development services to villagers throughout the OHVN zone. The 1992 Financial Analysis indicates that if the government agreed to cover the OHVN personnel costs, the contract plan would still require an annual subsidy in excess of 100 million CFA. Such an agreement would be possible if the OHVN retained its status as an EPA or changed to some type of "société mixte." Government regulations preclude public subsidies for the operating and the personnel costs of EPICs. Moreover, the employees of an EPIC are hired on a contract basis and do not enjoy tenure as civil servants.[57]

It appears that the OHVN would have to undertake more dramatic restructuring measures and identify more diverse and significant income generating activities in order to meet the conditions for a contract plan. As the Financial Analysis notes, even under the most optimistic assumptions for increased cotton and tobacco production and marketing, the OHVN would, at best, break even financially.

Second, the effort to refocus the OHVN toward more commercial activities raises questions about the organizational options for assuring continued public investment in rural development. OHVN development activities represent a significant operating loss for the Office. This loss is only partially covered with government and donor budget subsidies (Waddell and Audette, 1992). If the OHVN becomes an EPIC and was required by statute to operate with at least a balanced budget, it is not clear how the government would assure the delivery of these development services throughout the zone.

Even if the government regulations are changed (see discussion above), only a small hand-

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[57] See Loi No. 91-051/AN-RM Portant Statut Général des Etablissements Publics à Caractère Industriel et Commercial, 26 Février 1991; Ordonnance No. 91-014/P-CTSP Fixant les Principes Fondamentaux de l'Organisation et de Fonctionnement des Etablissements Publics à Caractère Industriel et Commerical et des Sociétés d'Etat, 28 Mai 1991; Loi No. 85-89/An-RM Abrogeant et Remplaçant la Loi No. 81-10/AN-RM du 3 Mars 1981 Portant Statut de Personnel des Sociétés et Entreprises d'Etat et du Personnel Malien des Sociétés d'Economie Mixte, 1 Novembre 1989.

ful of Associations Villageoises may be capable of continuing to qualify for production and equipment credit through the banks. Similarly, in the absence of more effective local governmental development program and policy making, most NGOs will probably continue to pursue their own program interests instead of working together in response to local development priorities (see discussion in Chapter III). As recognized during the 1987 "seminaire sur la restructuration," public investment ODRs are still required to provide technical services in many areas of the country.[58]

Some type of compromise relationship between the OHVN and the Ministry of Agriculture, Livestock and the Environment may also be possible. At the November Sélingué seminar (see Appendix C), the OHVN working group did not call for the conversion of the OHVN to an EPIC. This group recommended steps within the Ministry to establish administrative, monitoring and evaluation procedures that would facilitate the OHVN role in rural development. The group also called for "une plus grande implication des services centraux dans l'exécution des programmes de développement."

OHVN Collaborative Relationships

As discussed in Chapter III, the OHVN is the most important, but it is not the only development actor throughout its zone of intervention. A large number of non-governmental organizations and several other government projects also offer development services to villagers in the OHVN zone. In fact, villagers in some areas confront a veritable cafeteria of development opportunities.

Villagers recognize that the various services and projects expand the range of development services and help them to invest in the construction of schools, clinics, bridges and other infrastructure. At the same time, villagers candidly admit their "confusion et embarras .. devant la multitude d'organisations existant dans les villages" (see Appendix C).

This multiplicity of organizations and services raises two major problems for villagers. Many projects and NGOs offer their own independent credit on terms that are signficantly more favorable than those through the OHVN guaranteed credit program with the banks. Villagers find the additional opportunities for equipment, supplies, etc. attractive, but they also quickly, and in many cases, unknowingly, become overextended. Confused and embarrassed by their inability to meet their loan obligations, villagers are further confounded when the projects and NGOs discontinue their programs because of the low repayment rates.

Second, as noted earlier, in many villages the different projects and NGOs either tend to overburden the small number of "animateurs" or create unnecessary rivalries among animateurs. In both cases, villagers are confused when projects appear to provoke more social strife and disagreement than development.

Options

The Sélingué seminar recommended two general approaches to address the above issue.

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[58] The government will also need to address several specific issues related to the organization of agricultural extension services. Most of the OHVN field agents are unaware of many of the implications of OHVN's restructuring. Almost all, however, raise serious concerns about the larger geographic area to cover and logistic difficulties which hinder their ability to work effectively with farmers throughout their sous-secteurs. In addition, as the OHVN continues to downsize, a large number of field agents believe that the OHVN intends to replace them with the animateurs. As a result, the restructuring has created serious morale problems at the field level.

First, the seminar participants agreed that the identification and implementation of more coherent regional and local development programs required "une redéfinition du cadre formel de concertation entre tous les partenaires." Second, the seminar recommended that the government enforce its agreements with the NGOs, and called for "la définition d'un cadre de concertation approprié entre les structures d'encadrement de l'état, la chambre de l'agriculture et le CCA/ONG."

In this context, donor agencies might also help the government to examine options for revitalizing the local governmental conseils and comités de développement. These units of government, which everyone agrees do not work, could be the basis for establishing more coherent and popular development programs.

V. POLITICAL AND INSTITUTIONAL CONTEXT

Des Etats Généraux Du Monde Rural

Encouraged by the success of the Koutiala confrontation in mid-1991 and the political openness of the Comité de Transition pour le Salut du Peuple, Malian farmers at the National Conference in September 1991 demanded a special Etats Généraux du Monde Rural to be convened as the only effective way to address their demands and concerns. During the National Conference, as one observer noted, "les problèmes de traduction n'étaient pas réglés .. [et] .. les Ruraux étaient noyés au milieu d'intellectuels. Ensuite ils ont clamé haut et fort que désormais personne ne parlera à leur nom des grands problèmes qu'ils vivent." (Sy, 1992).

Following a series of eight regional preparatory conferences during November, over 300 participants, including regional delegates for farmers, herders, fishers and woodcutters convened for the five-day Etats Généraux in December 1991. Five working commissions addressed the priority concerns of the delegates in the areas of: natural resources management; women and development; infrastructure; decentralization; and, production and marketing.

The fifty-plus recommendations of the Etats Généraux reflected three types of demands. First, delegates called for a real transfer of power to give rural communities legislative and adjudicatory responsibilities for land tenure and natural resource management issues. In addition to recommending the preparation of a simple and concise Charte Foncière that would define the country's land tenure principles, the delegates endorsed: "la création de commissions locales de litiges et d'arbitrage; la responsabilisation pleine et entière des collectivités locales dans la gestion de leur terroir; et, la rédéfinition du rôle de l'Etat."

Second, the Etats Généraux issued several recommendations that set a quasi-revolutionary agenda for the post-Traoré era. These included calls for legislation: to give women land ownership and inheritance rights, and access to bank loans; to transfer full responsibility for the Rural Development Tax (TDRL) to local administrative units; and, to authorize the creation of rural unions. As Sy (1992) suggested, it was as if the delegates told the new government, "nous ne voulons plus que vos administrateurs, vos juges, vos gendarmes et vos forestiers règlent nos problèmes, mais faites une véritable décentralisation."

Finally, the delegates raised a series of more standard concerns dealing with price policy, marketing, storage, agricultural credit, input supply, and rural infrastructure. Underlying many of these questions, the Etats Généraux tried to focus the new government's attention on the real problem of "exode rural," namely the need for more productive rural employment opportunities.

Issues

The Etats Généraux may signal the beginning of a new era in Malian politics. The Etats define a rural agenda for the Third Republic, and more specifically, chart a course for the country's emerging farmers' movements.

The Chamber of Agriculture, which helped to organize the Etats Généraux, emerges from the Etats as a key political actor for rural producers. The delegates advocated its "redynamisation .. par le renforcement de ses moyens d'action pour la rendre plus fonctionnelle au service des paysans," and specifically called upon the government to

transfer all of the physical property of the former UDPM to the Chamber.

Some of the principal actors in rural development, including the ODRs, special projects and the NGOS, are curiously absent from the Etats Généraux recommendations. The establishment of a proposed follow-up commission, as encouraged by the delegates, could address many of the more immediate problems linked to the policies and programs of various government and non-governmental agencies in the rural sector.

In the absence of identifying specific steps to deal with concrete rural problems, however, the populist rhetoric of the Etats Généraux may quickly replace its effective use in setting the political agenda for Mali's rural producers. As Sy (1992) observed, "le risque existe que beaucoup de récommendations restent dans le tiroir, et que l'Etat reconquiert le terrain perdu pour redonner l'initiative à ses cadres techniques et administratifs. Je crois que tant qu'il n'y aura pas une farouche volonté de changement au niveau politique tout redeviendra comme avant."

Options

SYCOV

In late September 1992, the new Syndicat du Producteurs de Coton et Vivriers (SYCOV) held its constitutional congress in Cinzana. At this meeting, over 120 representatives of producers living in the CMDT and OHVN zones, approved the mission of SYCOV: "d'apporter aux adhérents la formation syndicale indispensable, et intervient auprès de l'Etat, des organismes nationaux, extra-nationaux et des services d'encadrement pour la défense des intérêts professionnels, économiques, sociaux et moraux des exploitants membres."

With membership open to cotton and food crop producers in the CMDT and OHVN zones, the SYCOV specifically seeks to defend its members' interests in all policies and negotiations that affect producer revenues. As the President and Director General of the CMDT noted, the establishment of SYCOV "constitute sans nul doute une consécration dans l'histoire de l'éveil de la conscience du monde rural dans notre pays."

SYCOV has received some technical assistance from AFDI (Agriculteurs Français et Développement International) with financial support from the French Ministry of Cooperation. It is possible that several U.S. farmer organizations and associations might also be interested in providing technical assistance, training and exchange visits with SYCOV.

The Chamber of Agriculture

Officially recognized as a representative body for "le monde paysan," the Chamber of Agriculture has been actively involved in resolving several conflicts between rural producers and government agencies.

As outlined in the Schéma Directeur du Secteur Développement Rural, the Chamber could be supported to strengthen its roles as: "l'instrument privilégié aux mains du monde rural pour engager des actions de protection de ses revenus"; "la structure de conseil d'appui pour l'émergence d'un véritable entreprenariat agricole;" and in "la promotion des organisations professionnelles du Secteur Rural."

Several types of assistance for the Chamber could be examined. These include, technical assistance in business management; assistance in the administration of business management training for farmer groups; and assistance channeled through the International

Federation of Agricultural Producers (Paris) with which the Chamber is affiliated.

Le Schéma Directeur Du Secteur Développement Rural

Published in March 1992, the Schéma Directeur represents the results of 6 months of collaboration and interministerial discussions (August 1991 to January 1992) led by the Ministry of Agriculture, Livestock and Environment. The three volume document identifies new guidelines for policies and programs designed to achieve the country's broad development objectives: to improve the standard of living and reduce income disparities; to achieve food self-sufficiency in the long-term and food security in the short-term; and, to preserve the country's natural resources and promote sustainable development.

The Schéma is the latest in a series of related statements and studies over the last 10 years dealing with both macro-economic (e.g., the PASA) and more sectoral dimensions (e.g., cereals marketing liberalization, restructuring of the ODRs, the Long-Term Research Plan, and the PNVA) of rural development in Mali. In contrast to many of these statements, however, the Schéma is presented as an evolving strategic planning instrument or frame of reference. Instead of a plan or shopping list of projects, the Schéma is an "instrument de cohérence et de consensus que ne peut être construit que par étapes successives."

Two fundamental issues influence the discussion of the major development goals and strategies throughout the Schéma. First, the weakness of the rural sector as the country's engine of development is tied to the absence of strong links between agriculture and industry. "Le secteur consomme peu de produits industriels nationaux, le volume de services privés rendus à l'agriculture est faible et surtout la transformation agro-industrielle ne joue pas le rôle d'adaptation des produits aux besoins des consommateurs." Consequently, the Schéma emphasizes two especially critical actions: "la promotion agro-alimentaire" and "la promotion des opérateurs ruraux."

Second, the Schéma goes well beyond a simple approach to government "désengagement" and seeks instead to define several criteria for dividing responsibilities between the government, the private sector and the rural population. In part, this involves adapting government roles and responsibilities to the needs of the private sector. In addition, it involves the re-establishment of a dialogue with the rural population and the creation of those conditions which promote a "véritable responsabilisation."

In summary, the policy approach reflected in the Schéma

> "implique .. de nouvelles responsabilités de l'Etat dans, précisement, l'aide à la responsabilisation de la société civile (particuliérement dans les domaines de la formation et de l'information.) Et elle suppose aussi une restructuration institutionnelle, guidée par le souci d'améliorer l'efficacité des services publics et celui de rapprocher l'état des ses administrés."

Options

In addition to the program options suggested by the Schéma, and discussed in Chapters III and IV, the Schéma outlines two major options which deserve consideration for future development programming in the OHVN zone.

The Schéma presents the development of a national agricultural export program as a key strategy in making the rural sector a real engine of development. Several inter-related elements of such a program include the establishment of regulations for product quality

control and the revision the country's investment code. A program would also involve business and management training for producer organizations and entrepreneurs, as well as efforts to assure the flexibility and adaptability of the country's agricultural extension programs. As the Schéma notes, the intensification of agricultural production must depend more on training and information than on a "vulgarisation trop dirigiste." Finally, attention will need to be given to improved infrastructure and adequate storage capacity.

The second major option involves a series of legislative and regulatory revisions that would enable the government to respond more effectively to the needs of producers and rural entrepreneurs. In addition to those reforms, as noted in Chapter III, which would enable the establishment of a variety of village-level organizations and federations of organizations, the Schéma calls for a re-examination of the government's decentralization program.

Two pilot programs may offer some useful lessons for future programming in the OHVN zone. The pilot decentralization program, "Appui Yanfolila," financed by the Swiss, seeks to develop and test a method for supporting decentralization in the Doussoudiana arrondissement. The pilot project makes 60% of the TDRL, or that amount which the law stipulates is available to local communities for their development program, and supports the local conseils de développement in learning how to allocate and manage these funds. The project also includes several types of planning and management training.

In addition, the ILO has recently launched (October 1992) a five year program with DNA-COOP entitled "Appui au programme de développement participatif des collectivités décentralisées pour la satisfaction des besoins essentiels." In addition to working in the Bougouni Cercle, the program expects to work throughout the Koulikoro region and in the Kita Cercle. The objectives of the program are to improve the management capacity of village organizations (AVs, women's groups and GIEs), support functional literacy and other required training, and encourage the identification and implementation of village-level "micro-réalisations and micro-investissements" which respond to local development needs.

The experiences of both projects in working outside an ODR and in support of local organizations should offer some useful insights for continued investments in favor of farmers and farmer groups in the OHVN zone.

VI. SUMMARY CONCLUSIONS AND OBSERVATIONS

This chapter discusses two principal conclusions and related observations that emerge from the major findings of the analysis of service delivery systems to farmers and village associations in the zone of the Office de la Haute Vallée du Niger. The objectives of this study (see Appendix A) are the basis for framing these two summary conclusions and observations. First, this chapter considers the quality of the performance of the various agencies working in the OHVN zone. Second, this chapter discusses the need for a series of new development partnerships between the government, the OHVN, farmers and village associations, the private sector and donor agencies.

A Cafeteria of Development Services

The OHVN, other government agencies and the NGOs present villagers in the zone with a veritable cafeteria of development services. In addition to the various OHVN services (extension, literacy, women's activities, credit/equipment and marketing) and affiliated programs, some villages also receive a literal smorgasbord of development projects from other government agencies and from non-governmental organizations. This panoply of development offerings is not new. In some areas, villagers are virtually "old hands" at choosing among the array of offers to improve the quality of their lives.

Villagers sincerely appreciate the various development opportunities offered to them from the "outside." In many cases, villagers will readily and easily identify the benefits from these projects, such as a village well, sheet metal roofs on their houses or a new motorbike. At the same time, village "scrap yards" of plows, tractors, mills, road equipment, etc. stand in mute testimony to the fragility of most development efforts.

In order to assure a greater measure of sustainable development and responsiveness to local interests and needs, most village-level development projects or services in the OHVN zone commonly base their activities on some type of reconnaissance or needs assessment survey. The farming systems research done by the DRSPR for the OHVN agricultural extension program illustrates the most formal and elaborate mechanism for identifying and responding to village-level conditions. More often, projects rely on brief, semi-structured interviews with available villagers.

It is not clear, however, to what extent the findings of these needs assessments and surveys actually guide programs and substitute for predetermined activities. Frequent reports of low adoption rates and the persistence of illiteracy, to cite just two examples, suggest the need to reexamine the fit between many development services and village needs. The persistent economic and educational marginalization of women, despite their widely recognized enthusiasm for, and significant contribution to village development projects, epitomizes the egregious discontinuities between the rhetoric and the realities of many development services.

The findings of this analysis confirm that development projects and services are not imposed on the villages. A more pluralist rural development policy long ago replaced the well-known command development programs of the 1960s. The findings of this analysis, however, do suggest that most development programs and projects still "deliver" or bring their services to the villages. That is, most projects do not work with villagers as co-participants in program design and implementation.

To illustrate. There is little evidence that findings from the DRSPR farming systems research help make the OHVN T&V approach more responsive to farmer experience and innovation. The functional literacy program has successfully exceeded its objectives for new village literacy centers, but remains singularly unresponsive to long-standing popular demands for advanced literacy materials. NGOs emphasize the importance of their assessment surveys, yet their activities appear remarkably uniform from village to village.

In response, villagers do not object to, nor do they overtly refuse many development services. Instead, they usually accept, yet essentially ignore, what is offered (see Brown, 1990). This helps explain, in part, the rolling and low membership in most groupements de vulgarisation. It also helps to explain why most village associations appear to be captured by the traditional village structure of authority and are thereby unable to emerge as independent "engines of development."

There are no uniform or global solutions to this issue. Each program and project will need to fashion its own, more responsive approach to its village activities. The findings of this analysis suggest, however, that the success of each program and project, and the possibilities for sustainable development could be enormously enhanced with more attention to the central principles of reciprocity, negotiation, exchange and co-responsibility with villagers.

New Partnerships

Sustainable development in the OHVN zone requires new partnerships for rural development. USAID, the OHVN, the government, the private sector, the NGOs and villagers need to be looking for new frameworks of institutional collaboration to respond successfully to the development challenges in the zone. This is not a hackneyed call for greater coordination and colloboration. Instead it is a call to design networks of combined public and private services that simultaneously draw upon the separate strengths, while enhancing their separate capabilities (see Esman, 1991).

The institutional framework for development in the OHVN zone remains tenuous, at best. The village associations represent significant opportunities for village development, yet even the most successful are unexpectedly fragile. The private sector is "thin" and uncertain. Villagers cannot rely on services from private suppliers or transport, but at the same time find banks that are willing to negotiate competitive credit rates. The government's rhetoric still surpasses the reality of its hesitant and tentative steps toward decentralization. NGOs offer a range of welcome services throughout the zone, but the nature of their activities raise serious questions about their effectiveness in promoting local institutional development. Finally, the various OHVN programs operate essentially as separate enterprises instead of performing as complementary parts of a more coherent and larger program.

The creation of a new and stronger institutional framework of service networks must begin with the bottom-up identification of issues and problems in the delivery of services to villagers. This analysis highlights only some of these problems. In addition, the OHVN and other government services must assume the responsibility to nurture these networks, yet have the capability to step back and defer to self-adjusting processes within these networks. Contrary to much of the popular rhetoric of privatization, the state needs to be reintroduced into rural development.

Each project or actor brings its own expertise and specialization into the development

arena. At the same time, there should be a shared recognition that deliberately designed complementary activities can enhance these separate specializations. In sum, a principal challenge, especially for USAID, involves finding ways to reframe its approach to development in the OHVN zone. As the principal donor agency, USAID needs to help all the development actors move away from thinking about their separate responsibilities to thinking about the coprovision and joint delivery of development services.

APPENDICES

TERMS OF REFERENCE

ANALYSIS OF SERVICE DELIVERY SYSTEMS TO FARMERS AND VILLAGE ASSOCIATIONS IN THE ZONE OF THE *OFFICE DE LA HAUTE VALLEE DU NIGER*

A. BACKGROUND AND RATIONALE FOR THE ANALYSIS

For over 13 years, USAID/Mali has been providing support for farmers in the zone of the *Office de la Haute Vallée du Niger* (OHVN). This support has been channeled through a number of GRM agencies, notably the OHVN, DNAFLA and Travaux Neufs. In addition, technical assistance has been provided by two institutional contract firms (Louis Berger International Inc. and Experience Inc.), as well as by the National Cooperative Business Association (NCBA/CLUSA).

The emphasis of the current phase of USAID support is toward the establishment of self-managed village associations. Success in this area has resulted in an ever-increasing number of village groups that are willing and capable of contracting directly for a variety of agricultural services, including supply of agricultural inputs, transport of produce and marketing. The access that these village groups have to commercial bank credit further enables them to pursue a variety of economic activities.

As farmers' needs, abilities and organizational structures and competence evolve in the zone, the question of how best to respond to the needs of different kinds of farmers and farmers' organizations becomes critically important, as do the derivative questions of institutional

sustainability, both of outside service agencies (e.g. OHVN and CLUSA) and local farmer organizations and village associations. For example, if farmers and village associations increasingly are capable of performing and contracting for marketing functions, but not extension functions, how will extension services continue to be provided (given that they are currently financed out of the profit margin on OHVN's marketing functions)? If some village associations, but not all, are capable of independently contracting for both marketing and extension, what are the implications for those less capable village associations which may continue to need OHVN or a similar agency for marketing and extension services?

This review will look at the participating organizations, from the farmers' perspective, to determine which ones provide the most effective services for farmers, and whether extension services might be obtained though more direct farmer-to-private operator arrangements. This study will examine the relationships of the development organizations in the Haute Vallée zone, to analyze the quality of services they are providing to farmers, and to suggest the most appropriate options for farmers, GRM agencies, cooperative organizations, and USAID.

B. OBJECTIVES

The specific objectives of this prospective analysis are as follows:

- to assess the performance, in terms of the quality of services provided to farmers, of the various agencies and organizations working in the OHVN zone;
- to identify the range of options available to the GRM and USAID for assisting farmers in the OHVN zone, presenting the advantages and disadvantages of each option;
- to determine how realistic is it to expect farmers and/or village associations to pursue their activities in a fashion that is more independent of a rural development organization, such as the OHVN;
- to determine whether the private sector can be counted on to play a greater role in agricultural extension.

C. STATEMENT OF WORK

The review of agencies and organizations working in the OHVN zone will provide answers to the following questions:

1. Technology Assessment

a) What are the various (modern and indigenous) agricultural production, storage and processing, and other income-generating technologies used at the household level in the area?

b) What are the significant non-agricultural production, income-generating activities in the zone?

c) Are there any indigenous crops that could be used to enhance the incomes of households in the zone?

d) What are the organizational mechanisms, if any, used by farmers to share information concerning agricultural technology? Are these organizations among those recognized as operating in the OHVN zone?

e) What organizations are responsible for the development of new or improved agricultural technologies? How do these organizations account for the use of indigenous knowledge?

f) What is the degree of integration of the indigenous and formal agricultural research and extension systems? Based on their current practices, do farmers have the opportunities, and do they seek changes in the technology packages that are promoted by the formal research and development organizations?

2. Technical Services Needs Analysis

a) What are the kinds of services required by farmers in the zone, and what is their likely evolution over the next 5 to 10 years?

b) What are the differences in the technical needs of farmers and farmer organizations, taking into account the fact that some village associations have progressed to the point where their needs are minimal, while other farmers are still very reliant on extension services?

c) Are these service requirements identified by the farmers themselves, or do problems of a technical nature need to be brought to their attention by technicians?

3. Identification of Organizations and their Contributions

a) What specific benefits have each of the organizations operating in the project zone contributed to the general welfare of the farmers in the OHV zone? What are the roles and relationships of each of these organizations (both formal and informal)?

(1) OHVN
(2) CLUSA
(3) Peace Corps
(4) PVO/NGO community
(5) Community development organizations
(6) USAID
(7) Participating institutions from other GRM agencies (DNAFLA, Travaux Neufs, DRSPR, etc.)

b) What has been the contribution of these organizations to farmers' current production levels and standard of living?

c) Are there other sources of extension services (e.g. the World Bank's Training/Visit Extension Project), now or likely to arrive in the future, outside of the OHVN? If so, how would farmers access these services? Would farmers be willing to pay for such services on a fee-per-service basis?

d) What services are being provided by the *Compagnie Malienne des Textiles* (CMDT) to farmers and village associations in its zone of intervention? Are there any lessons from the CMDT program that could be transferred to farmers and village associations in the OHVN zone?

4. Organizational Dynamics

a) Which village associations now have the capacity to manage agricultural input supply, transportation, marketing, credit and extension needs on their own, without the assistance of a rural development organization? What proportion are most likely to develop this capacity in the future?

b) Are extension programs and other services which are developed for farmers by the OHVN a response to an expressed need?

c) How are the needs of the rural populations transmitted to the OHVN, DNAFLA and CLUSA? What structures exist for assessing and meeting these needs?

d) Are there built-in organizational incentives or disincentives for organizations working in the OHVN zone to undertake innovative activities, explore new options, or plan future programs?

e) What is the effect of the restructuring of the OHVN on its organizational efficiency? At what pace should the restructuring continue?

5. Political Context

a) Are there situations where the institutional priorities of the OHVN are in conflict with the development goals of a village association? How are these issues resolved?

b) In what political and legal contexts do village associations operate? Is this context changing as a result of the recent *Etats Généraux* conferences with farmers? Will village associations have an enhanced political and economic role to play as a result of the adoption of the *Shéma Directeur du Secteur, Développement Rural*?

c) In what political context does the OHVN operate? Does this context constrain or enhance organizational behavior and effectiveness, particularly in relation to the supply of services to farmers?

d) How are the changing policies regarding rural organizations in Mali affecting village associations in the OHVN zone?

e) What changes, if any, has the recent change of status of the OHV from an *Opération* to an *Office* had on its ability to provide farmers with extension services?

6. Organizational Constraints

a) What factors constrain village organizations from further development? What changes in their structure would enhance their effectiveness in increasing agricultural production and involvement in other economic activities?

b) What factors constrain the OHVN from effectively fulfilling its own mandates? The analysis should look at the following possible constraints:

(1) human resource capability and availability
(2) financial resources (under various scenarios given differing relations with village associations)
(3) non-human resources
(4) gender-related issues
(5) socio-cultural constraints
(6) communications
(7) decision-making processes

D. LEVEL OF EFFORT AND QUALIFICATIONS

It is anticipated that three individuals will be required to undertake this evaluation: (1) a specialist in institutional analysis and rural development organizations (e.g. a political scientist, development anthropologist, rural sociologist, etc.); (2) an agricultural economist specializing in village cooperatives; and (3) a senior-level Malian rural development specialist. The level of effort for this activity has been estimated at 60 person-days for each of the three consultants.

E. REPORTS AND DELIVERABLES

The Contractor shall deliver to USAID/Mali five copies in English and five copies in French of a draft report which addresses the questions discussed in the scope of work above. Following receipt of the Mission's comments on the draft report, the Contractor shall have 15 days to submit five copies in English and five copies in French of a final report. Contractor shall provide the Mission with all publications, questionnaires and other printed materials gathered during the analysis, as well as a diskette containing report files.

F. RESPONSIBILITIES

USAID/Mali will provide the Contractor with background information on the Development of the Haute Vallée Project in the form of a Project Paper and other pertinent information on the purpose and progress of the Project.

The OHVN will provide the Contractor with office space and basic office equipment and furnishings. If a computer is needed, however, the Contractor should make arrangements to bring one from the U.S. In-country transportation will be provided by the OHVN.

The Contractor will report to the USAID/Mali DHV Project Officer, located in the Agricultural Development Office. The Project Officer will coordinate Contractor activities with the OHVN as well as with other participants in the Project (the technical assistance team, CLUSA, Peace Corps, etc.).

STUDY METHODS

Reconnaissance Phase - June 22-July 11, 1992

Purpose: To identify/confirm principal research issues and performance criteria.

Methods: Semi-Structured Interviews: OHVN, Government Services, Banks, ONGs, Projects, Peace Corps
Documentation Review
Selected Village Visits (11 villages; group and individual discussions with farmers): test research instruments; rapid organizational analysis.

Fieldwork Phase - July 12-September 24, 1992

Village-level Agricultural Technology and Technical Services Needs Assessment (11 villages)

4 in the Southeast (old CMDT zone); 4 in the Southwest; and 3 in the North (old OACV zone). Three criteria were used to select these villages: agro-ecological conditions, institutional backgrounds and situation (each with an AV and a Groupement de Vulgarisation, and/or DRSPR research villages or FAO seed multiplication centers). All villages were chosen in collaboration with the OHVN Chefs Secteurs.[1]

Underlying assumption in the choice of villages: use the most intensively contacted villages (but not showcase) villages as examples of what the potenital is, what works and what could be applied elsewhere in the OHVN zone.

Activities: Open group discussions with both women and men, informal individual interviews, resource activity mapping and field verification visits. Informal discussions with representatives of the OHVN, government services, ONGs and other project field staff.

OHVN Encadrement Questionnaire

Covered 6 themes: OHVN Mission/Restructuration; Vulgarisation Program; Research-Vulgarisation Relations; Vulgarisation-Villager Relations; the AVs; and OHVN-Local Administration Relations.

Administered to 95 OHVN field agents (completion of the questionnaire was not supervised in the Koulikoro and Gouani Secteurs).

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[1]All of the selected villages are in regular and close contact with OHVN and other development programs. Three villages are DRSPR research villages and three villages participate in the FAO seed multiplication project. Chefs sous-secteurs lived in three villages and CLUSA agents lived in another three. Ten of the 11 villages are within 20 kilometers of the secteur offices. Only one village, Missira, did not have any project activities nor any field agents in residence. In 1991, however, it was the site of one "journée agricole" and a major varietal-fertilizer and equipment trial.

Performance ranking of CLUSA-supported Associations Villageoises

A modified form of the CLUSA "Schema d'Evaluation" completed by CLUSA agents for 117 AVs.

In-Depth Case Studies (5) of CLUSA-supported Associations Villageoises

Five in-depth case studies of AVs, prepared by CLUSA agents, dealing with the following subjects: conditions of establishment; membership; activities; structure; management; institutional and political context.

Structured Interviews with 10 Associations Villageoises

In addition to covering most of the same subjects as the in-depth case studies, these group interviews with the bureau of each AV dealt with: other, non-OHVN interventions in the village; and, the impact of these interventions on village life.

Interviews were conducted in 4 "CLUSA villages" and 6 non-"CLUSA villages" in order to obtain a measure of verification among the different sources of information; visits with 3 AVs in the CMDT zone.

ONG Location and Activity Map

To obtain a graphic image of the diversity of agricultural and rural development services available to farm households in the OHVN zone.

Formal and Informal Interviews and Discussions; Documentation Review

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MINISTERE DU DEVELOPPEMENT RURAL
ET DE L'ENVIRONNEMENT
-=-=-=-=-=-=-=-=-=-
OFFICE DE LA HAUTE VALLEE DU NIGER
\B A M A K O/

REPUBLIQUE DU MALI
UN PEUPLE-UN BUT-UNE FOI
-:-:-:-:-

SEMINAIRE "ANALYSE DES SYSTEMES DE FOURNITURE DE SERVICE AUX PAYSANS ET AUX ASSOCIATIONS VILLAGEOISES".

R A P P O R T D E S Y N T H E S E

Novembre 1992.

RAPPORT DE SYNTHESE DU SEMINAIRE SUR L'ANALYSE DES SYSTEMES DE FOURNITURE DE SERVICE AUX PAYSANS ET AUX ASSOCIATIONS VILLAGEOISES.

Du 12 au 14 Novembre 92 s'est tenu à Sélingué le séminaire sur "l'Analyse des systèmes de service aux Paysans et aux AV de la zone OHVN".

L'objectif global du séminaire était d'approfondir dans un cadre plus élargi la réflexion sur le système de fourniture de service aux AV et aux Paysans de la zone OHVN.
Cette réflexion devrait aboutir à des propositions pour améliorer cette fourniture de service et formuler des récommandations aux intervenants.

Le Séminaire a regroupé:
- Le représentant DU MINISTERE DU DEVELOPPEMENT RURAL ET DE L'ENVIRONNEMENT
- Les représentants DE LA DNA,
- les agents OHVN,CLUSA,
- Les représentants DE L'US-AID
- Les services extérieurs suivants : LA DNAFLA,L'IER, DNGR,T.N.,CORPS DE LA PAIX, CMDT,CHAMBRE D'AGRICULTURE, CCA ONG, MINISTERE DE L'ADMINISTRATION TERRITORIALE,DNEF,DNE,LE PLAN DE PARRAINAGE, DRA DE KOULIKORO,DRA DE KAYES, LE REPRESENTANT DU COMMANDANT DE CERCLE DE KATI,LE CFAR DE OUELESSEBOUGOU,3 FACILITATEURS et l'équipe des CONSULTANTS.

Les travaux se sont déroulés sous la présidence de Mr Mory COULIBALY ,Conseiller Technique du Ministère du Developpement Rural et de l'Environnement.

I) DEROULEMENT DES TRAVAUX:

A la suite des débats en plénière, 11 axes de reflexions ont été retenus :

- Approvitionnement
- Commercialisation
- vulgarisation,recherche developpement
- Organisation du MONDE rural
- Infrastructure de base
- formation
- Politique de credit
- Cadre institutionnel de l'OHVN et decentralisation

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- Technologie et transformation des productions agricoles
- Rôle du secteur privé
- Collaboration inter-institutionnelle.

Ces 11 axes de reflexion ont été regroupés en six (6) points qui ont fait l'objet de travaux de groupes au sein de 6 ateliers.

AU TITRE DE L'APPROVISIONNEMENT, LA COMMERCIALISATION ET LA POLITIQUE DE CREDIT.

- Considérant les difficultés liées à l'approvisionnement des paysans en intrants et matériels agricoles, en zone OHVN

- Considérant les difficultés d'écoulement des matériels agricoles en zone OHVN,

- Considérant les difficultés liées à l'application correcte de la politique de crédit mise en place par l'OHVN,

Le Séminaire recommande

La poursuite des efforts deployés jusqu'ici par l'OHVN et la responsabilisation effective des AVs par la formation et la sensibilisation.

AU TITRE DE LA VULGARISATION, RECHERCHE ET DEVELOPPEMENT

- Considérant l'interdépendance de la vulgarisation, la recherche et la formation,

Le Séminaire reconmande

- De généraliser des sessions de formation intensive en alphabétisation.

- D'assurer des commandes suffisantes d'équipements des paysans, en logistique, en matériels d'expérimentation et de recherche, de financement et de durabilité des opérations.

AU TITRE DE L'ORGANISATION DU MONDE RURAL

- Considérant les difficultées, auxquelles sont confrontées les AVs en zone OHVN.

Le Séminaire reconmande :

- De démarrer des études pouvant aboutir à des propositions d'ammélioration du fonctionnement des AVs

- D'intensifier l'action de formation au niveau des AVs

AU TITRE DES INFRASTRUCTURES DE BASE, ET DES TECHNOLOGIES DE TRANSFORMATIONS DE PRODUCTIONS AGRICOLES

- Considérant l'importance des infrastructures dans le developpement socio-économique de la zone,

-Considérant l'insuffisance et la faible maitrîse des technologies dans les villages,

Le Séminaire recommande :

- la poursuite de l'action du bailleur de fonds dans le financement des infrastructures.

- la création de petites unités locales de transformation.

AU TITRE DU CADRE INSTITUTIONNEL DE L'OHVN ET DE LA DECENTRALISATION

Considérant les difficultés liées au statut juridique de L'OHVN,
Considérant la nécessaire accéleration du transfert de compétences aux communautés villagoises,

Le Séminaire recommande :

- Une redynamisation des organismes participatifs au processus de décentralisation.

- La création d'une structure chargée des problèmes feminins

- Une plus grande souplesse et diligence dans le traitement des dossiers par l'OHVN.

AU TITRE DE LA COLLABORATION INTER-INSTITUTIONNELLE ET DU SECTEUR PRIVE.

- Considérant le faible niveau de collaboration et de concertation entre l'OHVN et les multiples intervenants dans la zone.

- Considérant l'importance du secteur privé dans le développement socio-économique de la zone.

Le Séminaire recommande:

- l'instauration d'une plateforme commune de collaboration entre l'OHVN et les autres intervenants dans la zone.

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- De faire prendre les dispositions adéquates par l'OHVN et le département de tutelle de diligenter le retrait du marché de coton du circuit classique d'appel d'offres de la Direction Générale des marchés publiques.

- De sensibiliser et d'encourager l'initiative des AVs, à se regrouper pour le transport de leur coton.

RECOMMANDATION SPECIFIQUE:

Le séminaire après analyse du rapport des experts récommande:

- que l'équipe chargé de l'analyse des sytèmes de services aux paysans et aux AV de la zone OHVN s'inspire davantage des échanges fructueux enregistrés lors de ces journées de réflexions pour améliorer leur Rapport Final.

ANNEXES : RAPPORTS DE GROUPES.

SYNTHESE DES TRAVAUX DU GROUPE No 1

Les travaux en groupe ont porté sur trois aspects:

L'APPROVISIONNEMENT

L'approvisionnement consiste à satisfaire les besoins en intrants et matériels agricoles des paysans dans la zone OHVN.
Cet approvisionnement se fait à travers diverses structures:

I. Approvisionnement des magasins OHVN:
Pour satisfaire les besoins d'approvisionnement des paysans, l'OHVN procède d'abord à l'approvisionnement de ses propres magasins.

1). Difficultés:
Lourdeur administrative: elle constitue la principale difficulté dans l'approvisionnement correcte des paysans en instrants et matériels agricoles.

2). Solutions: pour parer à cette difficulté il faut accélérer le processus de désengagement de l'OHVN des fournitures d'intrants et matériels agricoles.

Former et informer les opérateurs économiques sur les techniques d'exécution des marchés publics.

II. Approvisionnement direct des AV sur le marché.

1) Les difficultés: il existe deux principalement:

- le délai de livraison des produits et matériels.
- la qualité des produits

2) Les solutions proposées:

- expression à temps des besoins AV
- constitution d'un fonds de roulement auprès des AV
- financement et enlèvement à temps des achats AV
- légalisation des contrats entre AV et Fournisseurs auprès d'autorité administrative ou judiciaire compétente.
- contrôle des qualités des produits par l'encadrement OHVN à court terme.
- formation des AV au contrôle de qualité des produits.

III. Approvisionnement des femmes:

Le seul problème qui existe à ce niveau est que les besoins des femmes ne sont pas pris en compte par les AV.
Les solutions consistent à:

- exprimer correctement les besoins d'approvisionnement des femmes.
- prendre en compte à court terme leurs besoins à partir des stocks OHVN.
- amender le protocole d'accord de garantie pour le cas spécifique des femmes.

LA POLITIQUE DE CREDIT.

A l'état actuel des choses, l'OHVN fait du crédit collectif et du crédit individuel. Mais de plus en plus le crédit collectif est transféré aux banques. IL existe un fonds de garantie pour le financement par les banques des activités économiques des AV. Cette politique de crédit agricole n'est pas sans problèmes.

1). Les difficultés:

- Les problèmes de remboursement des crédits
- la mobilisation de l'épargne villageoise
- l'accès des femmes au crédit
  C'est pourquoi il est nécessaire de poser des jalons de solutions.

2). Les solutions:

- amender le protocole d'accord afin de garantir toutes les activités, ycompris les intrants

- sensibiliser les AV par les banques et tous les partenaires

- créer des caisses d'épargne-crédit dans les villages AV

- respecter les clauses de préfinancement de la campagne coton et tabac

- former et informer les AV sur les procédures bancaires

- faire des études de faisabilité de toutes les activités économique (y compris l'embouche) garanties

- suivre l'utilisation du crédit accordé aux AV par l'encadrement (agents crédit)

- utiliser une partie des taxes de développement pour servir de caution des prêts villageois

- démarrage du crédit au secteur informel pour le financement des activités économiques en général, et celles des femmes en particulières.

LA COMMERCIALISATION

Elle consiste à acheter la production et la mettre en état de transformation et/ou de consommation intermediaire ou finale.

Cette action entraine des difficultés qui sont les suivantes:

A) POUR LA COMMERCIALISATION DES PRODUITS INDUSTRIELS (COTON-TABAC)

1) Les difficultées:

1-1 Le statut d'entreprise publique à caractère Administratif (E.P.A.) de l'OHVN.

1-2 l'inexistence de protocole formel entre l'OHVN et la SONATAM dans le cadre de la livraison de tabac.

1-3 Conditionnement du tabac avant achat.

1-4 Etat defectueux des pistes de la zone OHVN

1-5 Etat defectueux de l'usine CMDT de Bamako

1-6 Lourdeur administrative pour resoudre ces problèmes, les solutions suivantes sont proposées:

2) Les solutions: Elle sont de plusieurs ordres:

2-1 Etablissement d'un protocole ferme entre l'OHVN et la SONATAM

2-2 Application correcte du protocole entre l'OHVN et la SONATAM.

2-3 Application rigoureuse de l'instruction sur la commercialisation

2-4 Formation et sensibilisation des AVs dans les techniques de transport du coton.

2-5 Transfert de l'operation de transport aux AVs là oú les conditions sont reunies.

2-6 Création, organisation et reconnaissance de la coordination des AVs par l'autorité de tutelle.

B) COMMERCIALISATION DES CEREALES:

Pour la commercialisation des céréales, les AVs ont de problèmes

1) Les difficultés:

11- Retard dans la mise en place des fonds de commercialisation

1-2 Insuffisance d'information sur le marché céréalier.

1-3 Financement de la campagne

1-4 Difficultés d'écoulement du surplus céréalier.
Des solutions sont proposées pour applanir les difficultés

2) Les solutions : Elles consistent en :

2-1 La formulation à temps par les AVs des besions de financement de la campagne.

2-2 La mise en place à temps des fonds par les banques.

2-3 La formation des paysans aux techniques de fixation des prix et information sur le marché céréalier.

2-4 Inter-coopération entre zones déficitaires, et zones excédentaires

C) COMMERCIALISATION DES AUTRES PRODUIT
(SESAME, SOJA, FRUITS, LEGUMES...)

Ces autres produits connaissent des difficultés d'approvisionnement

1) Les difficultés:

1-1 Manque de débouchés sûrs

1-2 Difficultés de conservation des produits

Trois solutions sont proposées:

2) Les solutions

2-1 proceder à une étude du marché avant production

2-2 Developper et utiliser les techniques de marketing

2-3 Faciliter l'accès des AVs aux technologie de conservation.

GROUPE III

1 - ORGANISATION DU MONDE RURAL

1-1 - ORGANISATIONS ACTUELLES

- Famille
- Chefferie
- Associations des chasseurs
- Associations des femmes
- Associations rituelles
- Associations villageoises
- Groupements d'Intérêt Economique (G I E)

1-2 - ORGANISATIONS FORMELLES (LEGALES)

- Conseil de village
- Tous villageois
- Coopératives et Unions
- syndicats de producteurs
- AVS

2 - FORCES ET FAIBLESSES DES AVS EN ZONE OHVN

2-1 - Prise de conscience au sein des communautés villageoises de l'utilité des AVs

2-2 - Transfert de certaines compétences et responsabilités aux villageois : vulgarisation, gestion, crédit, etc.

2-3 - Les associations commencent à capitaliser d'importantes ressources financières

2-4 - Autofinancement de certains activités économiques

2-5 - L'investissement dans certains infrastructures : Ecoles , Maternités, Dispensaires, Ponts, Barrages, Magasins de stockage, etc

2-6 - Prise en charge des activités de formation au sein des villages.

3 - DIFFICULTES ET INSUFFISANCES.

3-1 - Confusion et embarras des paysans devant la multitude d'organisations existant dans les villages (conflit d'attitudes, de rôles, etc.)

3-2 - Confusion et embarras des paysans devant la multitude d'intervenants exterieurs (perte de temps, accueil.)

3-3 - Insuffisance numérique de néo-formés en gestion.

- Non utilisation immediate des compétences

- Absence de motivation matérielle des équipes d'animation et de vulgarisation

- l'exode des animateurs.

3-4 - Insuffisance dans l'application des critères de création des AVs

- L'insuffisance dans la formation des membres des bureaux.

- La faible représentativité des femmes dans les bureaux des AVS

3-5 - l'absence de réglement interieur dans les AVs: indiscipline de conflits de compétences et d'attribution.

3-6 - Le manque de présentation par certains bureaux de résultats des activités économiques en Assemblée générale.

3-7 - La mauvaise tenue des documents de gestion.

3-8 - Les difficultés d'accès des femmes au crédit due à la mauvaise organisation et au manque d'alphabetisation.

3-9 - Difficultés d'accés au crédit des maraîchers dues à la mauvaise organisation.

4 - RECOMMANDATIONS

4-1 - La généralisation des sessions interieures d'alphabetisation, la formation des néo-alphabètes, et la recherche de solution visant à motiver les animateurs

4-2 - Que les programmes de developpement répondent aux besoins des villages (O N G) .

4-3 - l'intensification des formations des leaders villageois.

4-4 - un plus grand soutien aux associations feminines.

4-5 - Responsabiliser les structures traditionnelles pour les orienter vers des activités économiques.

4-6 - Intensiffication de la formation du bureau des AVs.

GROUPE IV

Thème de réflexion: INFRASTRUCTURES DE BASE ET TECHNOLOGIES DE TRANSFORMATION DES PRODUITS AGRICOLES

I - INFRASTRUCTURES DE BASES

1- PISTES AGRICOLES

* CONSTRUCTION

- Realisation de 400 km en première phase et de 151 km, en deuxième phase. Total : 551 km sur une prevision de 800 km . Financement OHVN- USAID.

- Propositions :

. souhaitaons l'élaboration d'un planning de construction

. souhaitons la poursuite de l'action d'assistance du bailleur de fonds dans le financement des pistes agricoles.

* ENTRETIEN

- CONSTAT

. L'état rencontre des difficultés dans l'entretien des pistes agricoles

. Manque de fonds alloués à l'entretien cela a debouché sur la necessité de reduire la longueur des pistes à construire pour affecter la valeur de la difference au volet entretien (Reduction des pistes à construire de 400 km à 285 km)

. Niveau d'entretien des pistes par les populations rurales très FAIBLE.

. Degradation intensive des pistes par les transporteurs privés.

- PROPOSITIONS

. Dans le cadre de la décentralisation les structures locales doivent intervenir dans l'entretien des pistes (EXP: Taxes forfetaires pour l'entretien).

. Souhaitons que le volet entretien accompagne toujours le volets construction des pistes eu egard aux résultats de la phase II du projet D H V.

RECOMMANDATIONS

1- Recommandons l'élaboration d'un programme prévisionnel de construction des pistes agricoles par l'OHVN en rapport avec les services de renforcement des routes (S.R.R).

2- Souhaitons la poursuite du financement du volet pistes agricoles par le bailleur de fonds (US-AID).

3- Recommandons que dans le cadre de la décentralisation que le volet entretien des pistes soit pris en charge par les comités locaux de développement (C.L.D).

II. AUTRES INFRASTRCTURES.

Constats

- Existence de grandes potentialités en matière de:
  . barrages
  . périmètres
  . prairies, bas-fonds, mares
  . eaux souteraines

- Insuffisance et vétusté des infrastructures existantes (notamment les logements du personnel de terrain)

Propositions

- Elaboration d'un programme à long terme d'étude et de réalisation des potentialités sus citées.

- Elaboration et exécution d'un programme de réhabilitation et de construction de logement par l'OHVN et son baillleur de fonds.

Recommadations

- Souhaitons la prise en charge des charges des programmes d'étude et d'exécution des infrastructures ci-après:

  . barrages
  . petits périmètrs
  . bas-fonds
  . habitats (logements pour agents OHVN aussi bien du terrain que de la direction).

II. TECHNOLOGIES DE TRANSFORMATION DES PRODUITS AGRICOLES

Constats

- Les moyens existants sont insuffisants et non diversifiés
- Manque de réseau de production et de diffusion des technologies
- Difficulté de conservation et d'écoulement des produits agricoles.

Propositions

- Mise en place d'un réseau fiable de production et de diffusion de technologies.
- Rechercher et améliorer les moyens de conservation et diversifier les canaux d'écoulement des produits.

Récommandations

- Invitons l'OHVN à créer un cadre de collaboration appproprié avec toutes les structures et organisations intervenant dans le domaine de la transformation des produits agricoles.

GROUPRE V

Thème de Réflexion: "CADRE INSTITUTIONNEL ET DECENTRALISATION"

I. STATUT JURIDIQUE DE LA STUCTURE

L'OHVN est un établissement public à caractère administratif (E.P.A).

Ce statut lui confère certes des avantages ou atouts par rapport à son statut précédent d'opération de dévellopement, mais il reste que les inconvénients liés à ce statut d'E.P.A constituent un handicap certain au fonctionnement de certains de ses organes.

II. MISSION

Elle se définit comme suit:

- Amélioration des conditions de vie des populations de la zone.
- Augmentation des revenus (accroissement de la production, diversification des productions)
- Amélioration de la santé, de l'habitat et du niveau de l'éducation.
- Meilleure gestion des ressources naturelles
- Désenclavement
- Dévellopement des activités économiques
- Transfert des compétences.

III. ENVIRONNEMENT INSTITUTIONNEL ET JURIDIQUE DE L'OHVN

Cet environnement qui intègre l'OHVN en tant qu'institution chargée de l'organisation et de l'encadrement technique du monde paysan de la zone se compose comme suit:

1). OHVN et son cadre organisationnel

2). Organes administratifs de participation au développement participatif et intégré à la base; ce sont: les secteurs et comités de développement d'arrondissement, de cercle et de région, les conseils de circonscription.

3). La commission nationale de suivi des initiatives de base.

4). La cellule d'appui au développement à la base.

5). Autres partenaires au dévellopement au niveau du terrain (ONG, P.M.R, chambre de l'agriculture).

6). Autorités de tutelles du niveau central. Le groupe de travail à l'issue de se travaux après un large débat autour des points ci-dessus énuméré, a formulé les souhaits et propositions de résolution ci-après:

Du Cadre Organisationnel Actuel de L'ONVN

Le Groupe

- Considérant la lourdeur administrative de la DAF

- Considérant le caractère timide de l'intégration des actions de promotion féminimes dans les programmes actuels de l'OHVN.

- Considérant l'importance de la mission des chefs de secteurs

Propose

- La création d'une " Division chargé du Marketing, du Crédit, de l'Approvisionnement et des Transports".

- La création d'une unité chargée de la promotion féminime.

- Une définition claire de la mission des chefs de secteur tenant compte de sa dimension véritable.

De La Relance des Organes Administratifs de Participation

Le Groupe

- Considérant le désengagement de plus en plus inquiétant des structures participatives à la mission de dévellopement régional et local qui est la sienne et la nécessaire coordination de toutes les actions de développement en direction des collectivités paysannes.

Souhaite

- Une rédynamisation des dites structures dans toutes les zones du profit.

- Une redéfinition du cadre formel de concertation entre tous les partenaires pour une mise en oeuvre cohérente des programmes régionaux et locaux de développement.

De La nécessaire Collaboration avec tous les autres Partenaires au dévellopement au niveau terrain.

Le Groupe

- Considérant le trop grand risque de duplication des actions et le manque d'harmonisation et de coordination des différentes interventions des partenaires de terrains.

Souhaite

- Que les pouvoirs publics à tous les niveaux exercent leur mission de contrôle sur les ONG et autres organismes intervenants dans la même zone que les structures d'encadrement étatiques en vue d'un respect scrupuleux par celles-ci de l'accord-cadre qui les lie à l'état malien.

- La définition d'un cadre de concertation approprié entre les structures d'encadrement de l'état, la chambre de l'agriculture et le CCA/ONG.

De l'Exercice Efficace de la Mission de Tutelle

Le Groupe

- Considérant la loudeur administrative et ses conséquences sur les délais d'instruction des dossiers de procédure

- Considérant le laxisme dans le suivi des projets et programmes de dévellopement et le manque d'intégration des services centraux dans l'exécution des dits projets ou programmes.

Souhaite

- Une plus grande simplification des procédures administratives tenant compte des spécificités de la mission confiée au secteur du développement rural.

- Un choix judicieux des compétences chargées du suivi, de la supervision et de l'évaluation des projets et programmes de développement.

- Une plus grande implication des services centraux dans l'exécution des programmes de développement.

GROUPE VI

Thème de réflexion: COLLABORATION INTER-INSTITUTIONNELLE
ROLE DU SECTEUR PRIVE

I. COLLABORATION INTER-INSTITUTIONNELLE

- Manque de coordination dans les interventions des différentes et organismes

- Différences d'approches, implication des paysans

- Manque de répondants dans la pyramide administrative

- problème d'harmonisation des actions

- institutionnaliser la collaboration entre acteurs

- coopération

- forum des acteurs pour dégager un mode d'action (paternité - occupation - espace)

- Expérience des ONG "plan international" dans la collaboration inter institutionnele.

II. ROLE DU SECTEUR PRIVE

- privatisation du transport des produits:

  . manque de moyens de transport des produits
  . fiabilité des transporteurs

- A l'AV formation (CLUSA)

  . groupe
  . crédit individuel
  . approvisionnement (vente des produits toxiques "pesticides" par les commerçants.

- Prise en charge du transport par les AV (régroupées)

- Possibilités d'acquisition

- Prendre en compte les préocupations exprimées dans les divers états généraux (commerce, monde rural).

I. COLLABORATION INTER INSTITUTIONNELLE

Récommandations

a). Rédynamiser la commission d'évaluation des activités des ONG tant au niveau national qu'au niveau local (MATS).

b). Instaurer au niveau de l'OHVN des journées de concertation et de sensibilisation.

c). Faire un rôle un moteur par l'OHVN par l'initiation des cadres de collaboration (cahier de charger, protocole d'accord) avec les différents intervenants dans la zone.

d). Associer les différents intervenants à la planification des activités annuelles de l'OHVN.

e). Améliorer la communication entre les différentes structures sur le terrain.

f). Renforcer la sensibilisation, l'information auprès des paysans de façon à les amener à jouer un rôle important dans la collaboration inter institutionnelle et la privatisation.

II. ROLE DU SECTEUR PRIVE

Récommandation

a). Faire prendre les dispositions adéquates par l'OHVN et le département de tutelle afin de diligenter le retrait du marché de transport de coton du circuit classique de l'appel d'offres de la direction générale des marchés publiques.

b). Sensibiliser et encourager l'initiative des AV à se régrouper pour le transport de leur coton.

c). Maintenir un parc de sécurité de cinq véhicules pour prévenir les difficultés éventuelles de transport qui pourraient surgir si la prémière récommandation n'est pas satisfaite.

d). Prendre en compte les préocupations exprimées dans les divers états généraux (commerce, monde rural).

NOTE ON THE CMDT[1]

This note briefly discusses the services provided by the Compagnie Malienne des Textiles (CMDT) to farmers and village associations in its zone of intervention. The discussion identifies those features of the CMDT program that might be used to strengthen the delivery of services to farmers and village associations in the OHVN zone.

Overview

From its establishment in 1974 through 1991, the CMDT has invested almost 28 billion CFA in development programs throughout its zone of intervention.[2] Farmers in the zone receive about 700 million CFA annually in agricultural equipment and supplies, and the CMDT estimates that 75% of them use animal traction. Animal health and production services have also been available to farmers through the CMDT for almost 20 years.

In addition to its agricultural development program, the CMDT supports five principal rural development activities. First, according to the CMDT, "des facilités de crédits sont accordées aux femmes dans tous les domaines de leurs activités." Second, more than 450 village wells have been built, and another 450 wells are planned. Third, the CMDT has supported the training of more 700 village-level, public health "hygenistes-sécouristes." Fourth, as a result of its functional literacy and training program, the CMDT reports that village associations annually market almost 80% of the cotton production. Finally, "la zone a été largement désenclavée grâce à la mise en oeuvre d'une politique de piste rurale" (cited in SYCOV, 1992).

The CMDT program exhibits two distinguishing features. First, the program focuses on cotton production within the context of the various production systems found throughout the zone. As the first Director stated in 1978: the CMDT program "vise à développer non pas une seule culture mais l'ensemble des cultures les mieux adaptées à l'économie et à l'écologie de la zone, non seulement les seules productions agricoles mais l'ensemble des productions: pastorales, sylvicoles et artisanales" (cited in Belloncle, 1990). Second, the CMDT continues to work actively and directly to improve the capacity of villagers to manage their own development activities.

Village Associations

In 1974, the CMDT inherited a CFDT village program that was based largely on the use of village collaborators, who were literate in French, and who could serve as temporary agents for cotton sales and marketing, and for equipment and supplies distribution. As more villagers acquired literacy skills through the UNESCO-sponsored World Experimental Literacy Program, they demanded greater involvement to assure honest cotton marketing practices. In response, the CMDT devolved more marketing, distribution and extension responsibilities to the growing number of neo-literate villagers. This led in some villages to the establishment of small marketing and distribution management committees, and eventually, with CMDT assistance, to the creation of village associations.

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[1]This note is based on information obtained from interviews with CMDT personnel and with selected AVs in the CMDT zone, and from recent reviews of the village associations in the CMDT zone (Belloncle, 1990; MAEE, 1991).

[2]The CMDT replaced the Compagnie Française de Développement des Textiles (CFDT) in 1974. In 1968, CFDT agents started to replace the Agriculture Service in an area that covered Dioila, Koutiala, Sikasso and Kaidolo. The CFDT program promoted cotton production, but also included some crop diversification with dah and an integrated development activity near Fana.

During a series of organizational and policy changes, which included the negotiation of a 10-year contract plan with the government in 1985, the CMDT responded to villager demands to redefine its village association policy. Village representatives and the CMDT agreed to the use of seven criteria to evaluate the capacity of associations for self-management and thereby to define their relationship with the CMDT.[3] Associations with "high" scores on these criteria benefit from "un encadrement léger" in which one CMDT field agent covers 8 villages grouped into a "Zone d'Animation et d'Expansion Rurale" (ZAER).

The CMDT covers an estimated 4,300 villages. About 40% of these villages have village associations and 3% have established cooperatives, or tons villageois.

Cotton production and the CMDT monopoly of the cotton market drive, and define the essential characteristics of, the CMDT relationship with the village groups. A principal goal of the CMDT is to achieve annual, specified levels of cotton production. When CMDT field agents listen and respond to farmers' problems, they do so primarily in order to assure that farmers will be able to meet expected levels of cotton production. As LeRoy, Moineau and Rocaboy note:

> "Les agents pensent et agissent beaucoup plus en termes de moyens à mettre à la disposition des communautés plutôt qu'en conseiller à la formulation d'une demarche... La formation des équipes techniques villageoises est essentiellement une formation specialisée à l'exécution des tâches conçues et programmées par le dispositif" (MAEE, 1991: 31).

The approach has been successful. In its early years, the CMDT more than doubled cotton production.

The CMDT monopoly on cotton marketing guarantees the market for farmers and helps them to benefit from the lowest agricultural input prices in the country. As the CMDT discovered in early 1991, its monopoly position also makes it an easy target for a farmers' marketing boycott and demands for higher prices. The new farmers' union, SYCOV, derives much of its strength from CMDT's monopoly marketing position.

Recent reviews identify a structural weakness in the CMDT-village relationship. The apparent success of most of the CMDT AVs may divert attention from problems that arise because "l'association villageoise n'est pas un collectif autonome indépendant de la communauté villageoise." As LeRoy, et al. argue, "l'organisation communautaire rest prévalent ..et.. l'émergence d'un "sujet" de droit exerçant les capacités d'une personne juridique "physique" ne concerne qu'un nombre très limité d'acteurs et d'une manière très fragile" (MAEE, 1991: 20-21).

Other manifestations of this weakness include: the absence of well-maintained AV account books; the reduced importance placed on the collection of a "caution solidaire" in the AVs; and, the lack of innovation and responsiveness in the CMDT technical message to farmers.

Lessons for the OHVN

It is clear that the CMDT and OHVN share similar problems with the AVS. The most important arises from the fragility of the AVs as organizations that have their own juridical personality and are operationally separate from the village social structure. Similarly, both organizations have serious problems related to the relevance of their technical recommendations to farmers' conditions and problems.

Nevertheless, there are significant differences between the CMDT and the OHVN. The OHVN reflects a much less "corporatist" approach to villagers in its zone. As a result, the OHVN has the opportunity to

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[3]These criteria include: literacy level; economic activities; management of documents; technical capability; income-generation; operation of the AV bureau; and, frequency of general assembly meetings.

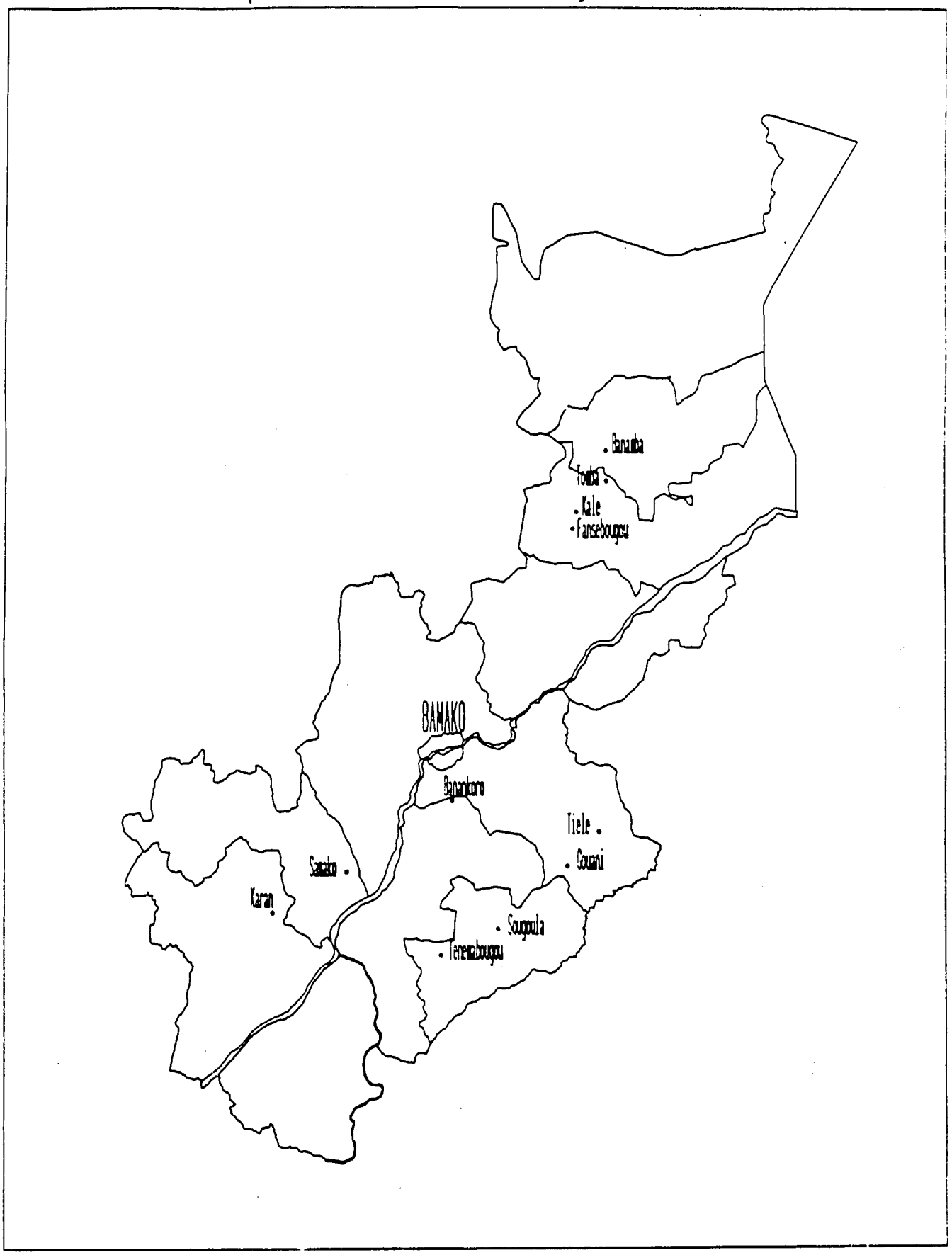
work closely with AVs to forge more open and flexible relationships that are not based on the achievement of production quotas.

As the OHVN charts its course, it might give serious consideration to the effective use of the "caution solidaire" as a means for building and strengthening AVs. A "caution" helps to build commitment among members, and experiences elsewhere in the world illustrate the key role of this commitment to long-term organizational success.

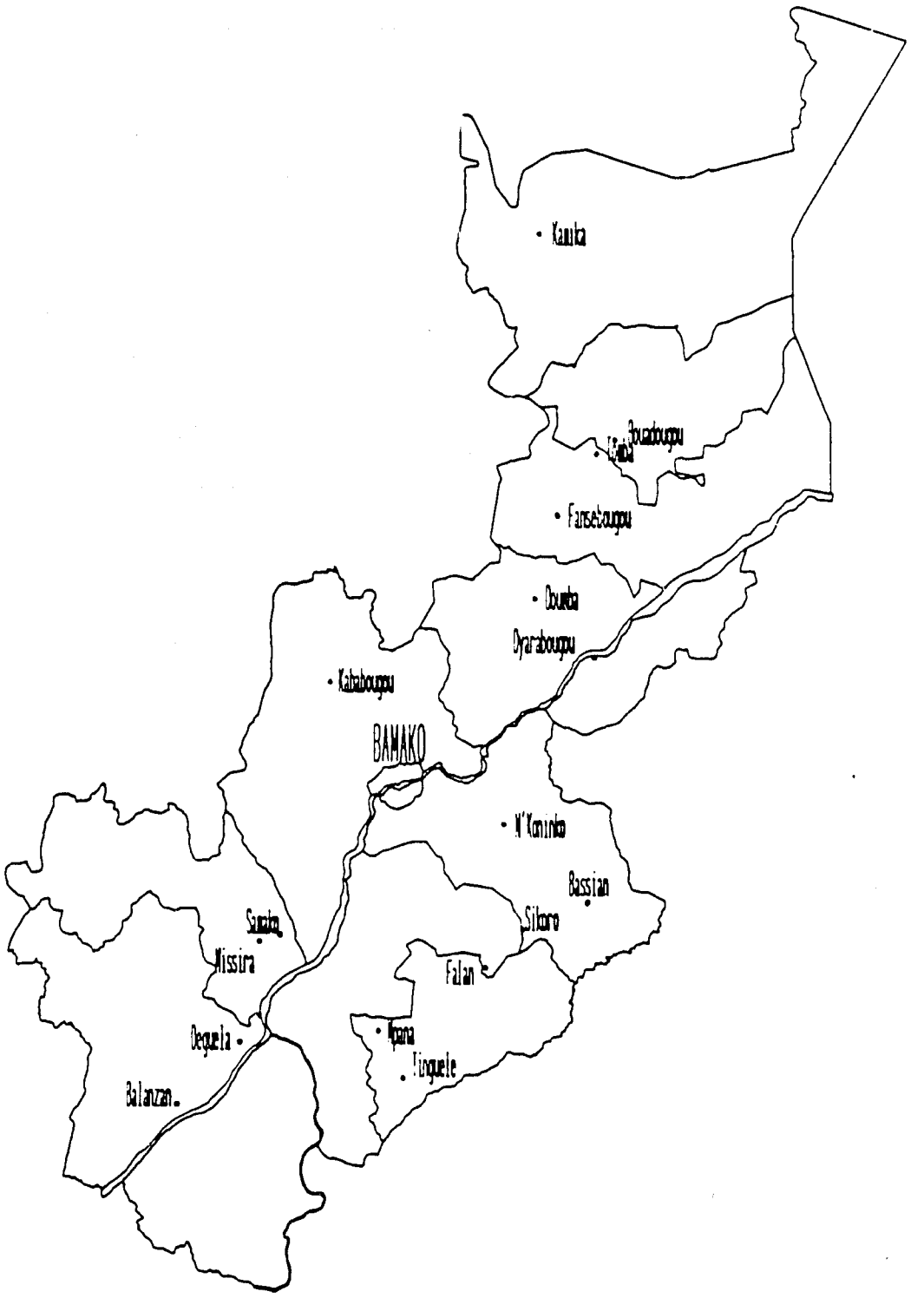
MAPS

1. Rapid Reconnaissance Survey Sites
2. Main Phase Research Sites
3. Villages in the OHVN Zone and Technology Assessment Sites
4. Village Associations and AV Interview Sites
5. CLUSA Village Associations and Indepth CLUSA Case Study Sites

Rapid Reconnaissance Survey Sites



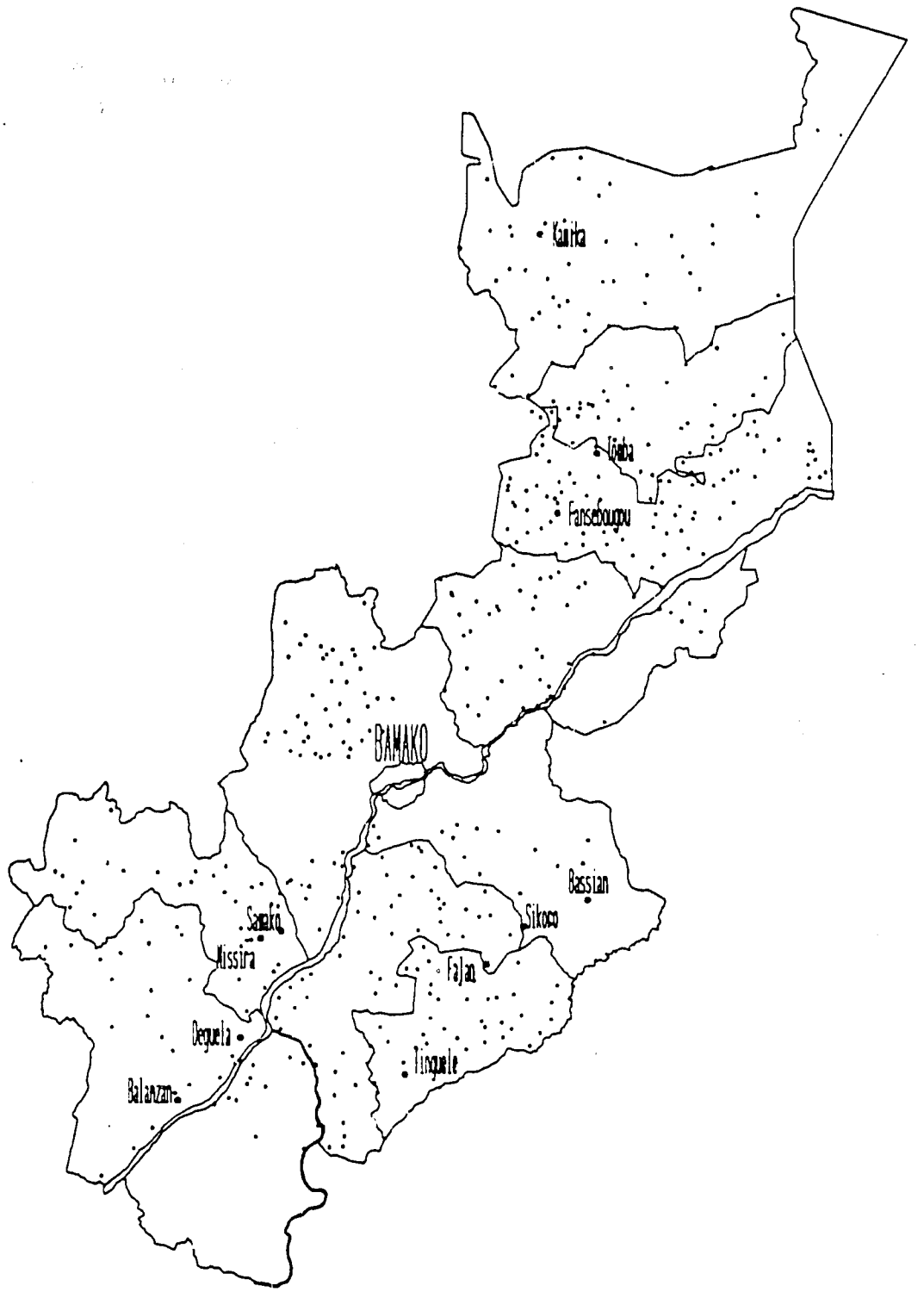
Main Phase Research Sites



(Does not include village of Worofara, secteur Oulésébougou)

Villages in the OHVN Zone and Technology Assessment Sites

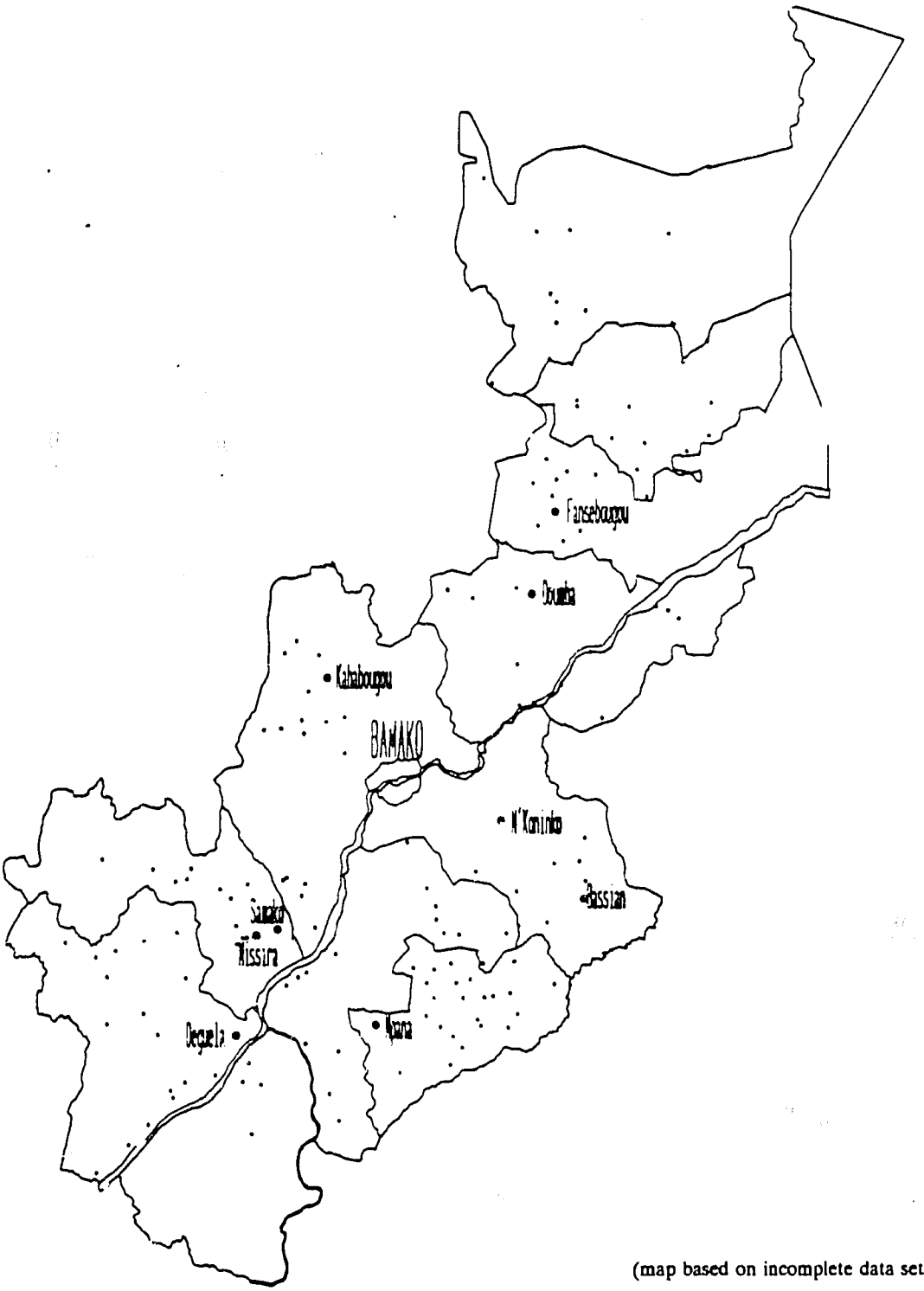
Map 3



(map based on incomplete data sets)

Village Associations and AV Interview Sites

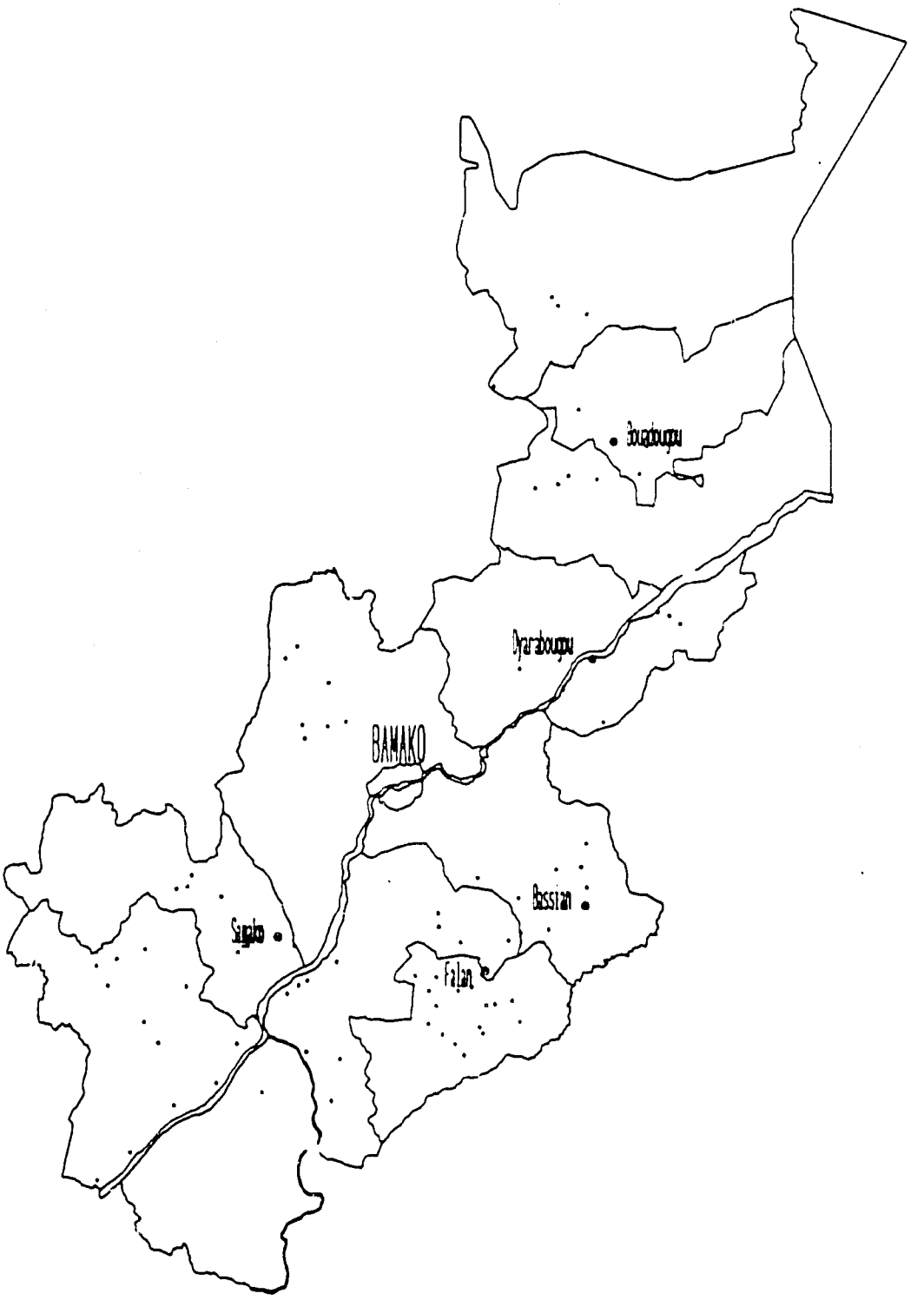
Map 4



(map based on incomplete data sets)

(Does not include village of Worofara, secteur Oulésséboougou)

CLUSA Village Associations and In-Depth CLUSA Case Study Sites



(map based on incomplete data sets)

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