

Chapter II Project Implementation

II.1 Project implementation system

II.1.1 Overview of project implementation system

(1) Implementation system

The implementation organization of this basic development plan is the Project Office for the Combat of Desertification (hereafter referred to as the Project Office). With regard to implementation, in addition to coordination of work and related sections at the department level, it will receive requests for technical aid from related sections. At the local level, Soil Committees based on the Rural Code and direct soil management at the village level (see 11.1.2 Establishment of land management committees).

The elements of this plan are covered by many ministries and agencies. The implementation of these elements as a whole is indispensable for desertification control in the department of Tillabéri. Therefore, operation committees will be formed at the national level in each ministry related to the content of the work as co-ordination offices with each of the related ministries regarding planning and the Department of Water Resources and the Environment.

(2) Implementation procedure

The Terroir Management Committee of each village will select priority elements based on the opinion of the residents among the components of the Master Plan. It will establish implementation plans and will make a request for approval to the project office. Final decision about implementation will be made, after discussion with the office and the committee members, but the project office will subsidize the parts which would be judged as being beyond the capacity of the Terroir Management Committee and the Agricultural Aid Center Office and provide required funding and technical advice.

During the initial phase of implementation, as it seems difficult to address it independently and as a group, the project office will delegate a Agricultural Aid Center Office to each village to help with the constitution of a Terroir Management Committee at the village level, and to accelerate discussions within the village, to explain project components to the residents, and the obligation they should fulfill for their request to be approved.

For a project to be accepted, there are two requirements: ① implementation of project with active participation of the residents in planning, ② contribution of part of the resources input by the residents (part of the funding, supply of lands, manpower, maintenance cost). The project will not be started until the two requirements are prepared to meet.

With the development of the implementation system and the above-mentioned procedures, the residents will participate as a major element of the whole project process. This is designed to give the residents the capacity to manage project output in a sustainable way. Figure 11.1.1 indicates the project implementation system, and Table 11.1.1 the list of projects related organizations.

Figure 11.1.1 Project implementation system

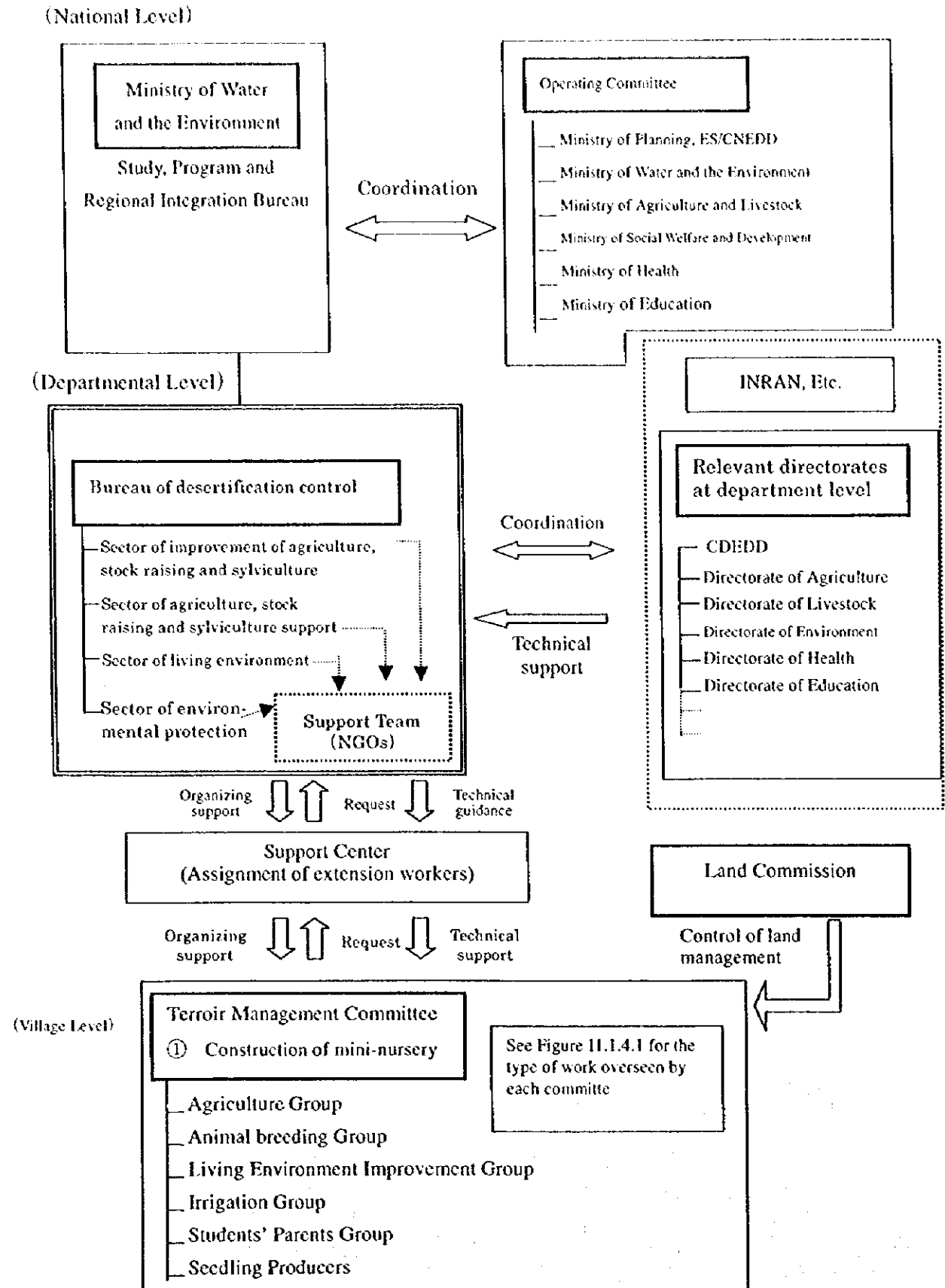


Table 11.1.1 List of project implementation related organizations

⊙ :- Project implementation organization
 ○ :- Organization providing technical support for project implementation
 ▲ :- Place/organization to improve the facilities
 △ :- Beneficiary of the project

Project implementation related organization	Name of organization					Remarks
	(1) Project office	(2) Government agency	(3) Terroir management (village)	(4) Individual farmer	(5) Others	
Name of ⊙	Name of ⊙	Name of ⊙	Name of ⊙	Place/organization of ▲	△ Beneficiary	
1. Agriculture, stock raising and silviculture improvement plan						
1.1. Agriculture						
(1) Major cereal ameliorated seeds distribution	⊙	○		△	Individual farmers	Distribution of seeds to be implemented by the Support Team
Improvement of the seed center					Lossa National Seed Center	
Seed plot accommodation (millet)	⊙	○		▲	Contracted farmer	Contract through Lossa National Seed Center
Seed plot accommodation (sorghum)	⊙	○		▲	Contracted farmer	Contract through Lossa National Seed Center
(2) Conservation of agricultural land						
Stone ridge	⊙		▲	△	Individual farmers	Individual farmers
Contour planting of andropogon	⊙		▲	△	Individual farmers	Individual farmers
Zai	⊙		▲	△	Individual farmers	Individual farmers
Simple eyebrow ridge	⊙		▲	△	Individual farmers	Individual farmers
(3) Improvement of agricultural roads						
Agricultural roads	⊙		▲	△	Living environment improvement group	Residents participating in planning/construction work
Kori crossing works	⊙		▲	△	Living environment improvement group	Residents participating in planning/construction work
(4) Restoration of large-scale irrigation facilities						
Restoration of large-scale irrigation facilities	⊙	○		△	ONAHA	Individual farmers
(5) Improvement of small-scale irrigation facilities						
Field development	⊙		▲	△	Irrigation division groups	Residents participating in planning/construction work
Small dam construction	⊙		▲	△	Common land, Living environment improvement group	Residents participating in planning/construction work
Pond restoration (Tétra)	⊙		▲	△	Common land, Living environment improvement group	Residents participating in planning/construction work
Pond development (Flingué)	⊙		▲	△	Common land, Living environment improvement group	Residents participating in planning/construction work
Pond development (Ouallam)	⊙		▲	△	Common land, Living environment improvement group	Residents participating in planning/construction work
Pond development (Tétra)	⊙		▲	△	Common land, Living environment improvement group	Residents participating in planning/construction work

Project implementation related organization	Name of organization			Remarks
	① Project office	② Government agency	③ Terroir management (village)	
(6) Improvement of distribution of agricultural products				
(1) Improvement of market management system Office improvement	○	▲	△	Individual farmers
Information gathering (Tilabéri city, Niamey city) Information gathering (Niger as a whole)	○	▲	△	Individual farmers
	○			Individual farmers
(2) Model project for improvement of collecting shipping Improvement of collecting shipping facilities	○		▲	Individual farmers
(7) Improvement of land commission Cudaster elaboration	○			Individual farmers
2. Stock raising				
	○	▲	△	Individual farmers
	○	○	△	Individual farmers
(1) Improvement of livestock Livestock improvement center Introduction of site bulls Introduction of superior cows	○	○	▲	Individual farmers
(2) Improvement of fodder production infrastructure Grassland development Grassland rehabilitation	○		▲	Individual farmers
(3) Improvement of water supply facilities for livestock Rehabilitation of deep wells (60m) Rehabilitation of wells (30m) Construction of new wells (30m)	○		▲	Individual farmers
	○		▲	Individual farmers
	○		▲	Individual farmers
(4) Improvement of animal hygiene Livestock veterinary center	○	○	▲	Individual farmers

	Project implementation related organization				Name of organization			Remarks
	(1) Project office	(2) Government agency	(3) Terror management (village)	(4) Individual farmer	(5) Others	Name of	Place/organization of	
(2) Agriculture, stock raising and sylviculture support (financial support, etc.)								
Cereal bank, mill	○		▲	△		Project office	Agriculture group	Individual farmers
Small-scale credit scheme	○		▲	△		Project office	Agriculture group	Individual farmers
Agricultural management credit scheme	○		▲	△		Project office	Agriculture group	Terror management groups, Individual farmers
Equipment and materials bank	○		▲	△		Project office	Agriculture group	Individual farmers
3. Living environment improvement plan								
(1) Improvement of potable water supply facilities								
Small-scale water supply system	○		▲	△		Project office	Living environment improvement group	Residents participating in planning/construction work
Modern wells (100m)	○		▲	△		Project office	Living environment improvement group	Residents participating in planning/construction work
Construction of new wells (30m)	○		▲	△		Project office	Living environment improvement group	Residents participating in planning/construction work
Restoration of wells (30m)	○		▲	△		Project office	Living environment improvement group	Residents participating in planning/construction work
(2) Information diffusion/education facilities								
(3) Improvement of health/hygiene								
Simple health hut	○		▲	△		Project office	Living environment improvement group	Residents participating in planning/construction work
(4) Improvement of education								
Classrooms	○		▲	△		Project office	Parent group	Residents participating in planning/construction work
School farms	○		▲	△		Project office	Parent group	Residents participating in planning/construction work
4. Environment conservation plan								
(1) Conservation of soil								
Restoration of grassland (plowing)	○		▲	△		Departmental Environment Bureau	Public land, common land/ Living environment improvement group	Residents
(2) Afforestation								
Afforestation (district)	○		▲	△		District Forest Bureau	Public land, common land	Residents
Afforestation (sub-district)	○		▲	△		District Forest Bureau	Public land, common land	Residents
Afforestation (village)	○		▲	△		Living environment improvement group	Public land, common land	Residents
								Residents participating in planning/construction work

11.1.2 Establishment of land commission

All the lands covered by the projects must be registered in a rural cadaster of the land commission administered by rural villages based on the rural code of the GON (Order of the President No. 97-367 of October 1997: Commission fonciere) (refer to Annex 9.4.2.1).

In establishing a land commission, a project sponsor shall request an establishment of the commission from the National Committee of the Rural Code. In that occasion, agreements will be made between the project sponsor and the National Committee of the Rural Code on the bearing of budgets of around 50 million FCFA which is required for two year operation of the land commission including the cost for purchasing four-wheel-drive cars, measuring equipment, computers, etc. (personnel cost to be borne by the government). Following the agreement, the National Committee of the Rural Code will delegate a secretary-general to the relevant district, who will gather necessary members and organize a land commission. Upon completion of organization, the Ministry of Agriculture and Livestock will publicize the establishment of the land commission on the national gazette.

As the land commission is established in 1997 with supports of IBRD in Say district, land commissions will be newly established in 5 districts excluding Say districts in this Master Plan.

(Reference) Example of a land commission in the district of Say

As of November, 1998, it was at the stage of education of inhabitants and making of the (proposed) Land Register Original and the Land Register has not been made.

1) Organization

The land commission has 22 members consisting of a district chief who acts as a chairperson, technical staff of each bureau of the district, the canton chief, and representatives from related organizations (women's associations, youth associations, agricultural associations, stockbreeders' associations, etc.). As the members have their original businesses and are engaged in the commission supplementary, they are not remunerated. When the commission was established, the members had participated in a training tour to a departmental land commission in the department of Zinder which has experiences in land registration work. The land commission in Say has the office inside the district building, and the secretary-general will be on duty regularly. As the members are not paid, there will be no fund necessary for opening the commission. But the expenses for transportation of members and operational expenses for holding large conferences will be paid out by the government to the commission. After completing the project, the land commission will be maintained and operated by a departmental budget with population's participation.

2) How to educate population

The project sponsor will entrust a village development agent (Agent de developpement rurale: a specialist in the field of agricultural engineering, agriculture, stock raising, etc. of the Ministry of Agriculture and Livestock who resides in each village of the country and engages in rural development) with educating the population by paying him daily allowances and necessary expenses (for a motorbike per person and the fuel). The village development agent will distribute copies of the Rural Code written in five languages (French, Zarma, Haoussa, Gourmanche and Peuls) to 217 villages and explain its contents to the population. Also, the agent will help illiterate population make land registration application before the commission.

3) Necessities when applying land registration in the rural cadaster

The owner of land will describe the location of the land (canton name, village name, section name), name of the owner, date of birth, address, occupation, names of parents, resources existing in the land (field, number and location of wells, etc.) in the application form for land registration with his/her signature, obtain the signatures of the village chief, the canton chief and the district chief, and then submit it to the land commission. The description of the application form submitted will be made public through radio or display on a signboard. If nobody filed an objection, the land commission will measure the land, prepare a land registration map and officially register the information relating to the land in the rural cadaster. The land registration map will be made in quadruplicate, and the land owner, the land commission, the village chief and the canton chief will hold one copy each. The measuring equipment, office supplies, etc. will be supplied each time by the project sponsor. The project sponsor will bear the expenses for teaching the measuring technique to the members of the land commission.

11.1.3 How to solve problems related to land at village level

If there should arise any problems concerning the rights related to land in implementing desertification control projects from the project side, in the experience of JALDA during the actual survey, it should desirably be solved at the village level by referring to the following approach.

- ① First step: As interests of people are diverse even if they live in a same community, individual approach can be taken respectively against group having different interest (by age, occupation, gender, etc.). Especially, it would be effective to place emphasize on groups of younger generations as project promoters because younger generations tend to be more reform oriented compared to conservative older generations. It should be noted that persuasion of the groups negative to the project would better be made by another community group rather than by the project staff who is an outsider.

For sensibilize the negative people, it would be effective to organize a Study tour to a

village where a project had been already implemented so that farmers can learn the benefits directly from the beneficiaries.

- ② Second step: It is recommended to have the promoters group hoping the project implementation find out a means to persuade the negative group themselves. It is important here to have them understand that the future of the community is dependent upon the younger generations and that radical actions like ignoring the negative group just result in conflicts, should be avoided.
- ③ Third step: The promoters group will be encouraged to persuade the negative group, first through a direct discussion. Failing that, the canton chief who has traditional authority and sits on top of the village chiefs will be asked to persuade the negative group. Failing that again, each member of the negative group will be persuaded individually by the member of the promoters group.

11.1.4 Implementation of project by Terroir Management Committee

(1) How to approach the population

The following is the process taken by the project side in order to establish a terroir management committee at a village in the Sahel where the village chiefs have great influence and the adult literacy rate and the school attendance rate by girls are low, with no experience of projects in the past.

- ① First phase: In order to promote the activities in the village smoothly, it is necessary to secure understanding and support of the existing influential persons. In order to change the way of thinking of influential persons who has been relied on traditional customs and are generally little educated, such persons will be dispatched to other districts where projects have been implemented so that they can see the project effects with their own eyes.
- ② Second phase: There will be always several persons who speak and write either French, local language or Arabic, who should act as the first key persons to organize village population for the project.
- ③ Third phase: As villagers who are interested in projects become to gather centering the key persons, leaders for the village organizations for various activities will be selected out of them, who will then be trained on a Study tour according to the nature of activities which he/she will be in charge such as planning , management , accounting, etc.
- ④ Fourth phase: The expected organization leaders who have received trainings will organize and managing system under the Terroir Management Committee. Additional trainings will be given on necessity.

- ⑤ Fifth phase: After each activity is started under the management of the Terroir Management Committee, supports from the project office will be reduced and the activities will be moved toward self-management.

(2) Project implementation, evaluation and management

Whereas the following project implementation method is proposed based on the result of the local commissioned Study (refer to Annex 11.1.4.1), further details shall be determined by consultation with village residents at the time of actual implementation of the project. As for the survey, we hope to instill the idea that "We should do what we can by ourselves because it is for the good of our village." in the inhabitants and listen to the opinions of the inhabitants as we implement each method. The type and implementation of the projects in the 3 villages are slightly different, but in general, we will proceed in the following way.

The existing power structures of the villages are political ones and on the other hand, the terroir management committee is an economic body so they can cooperate. In addition, the terroir management committee is basically a democratic organization which does not advocate the removal of existing power holders. The two are therefore not antagonistic. However, when the terroir management committee does not include existing power holders, the executive department holds an important position in the decision making process and should show respect to existing power holders by reporting to them and gaining their permission to take action.

1) Organization of Terroir Management Committee (draft)

A Terroir Management Committee indicated in Figure 11.1.4.1 shall be organized based on the following conditions. The terroir management committee of Magou Village in the JALDA Survey should include the inhabitants of the 3 villages in its operations. Table 11.1.4.1 shows the foundation statute (draft) (refer to Annex 11.1.4.2 for the internal rules (draft)).

- ① Fees and charges to be determined by each group shall be subject to the vote at the general assembly.
- ② Eight members of the agriculture group, the animal breeding group and living environment improvement group and one common assistant to the said three groups, altogether nine, are paid a remuneration of 5,000 FCFA/month out of the autonomous exploitation fund.
- ③ A project that is capable of making profits shall be operated on a self-supporting basis in principle up to the maximum profits of 250,000 FCFA, and any excess shall be transferred to the autonomous exploitation fund.
- ④ The office of the Executive Board will be equipped with one meeting room, three office rooms, ten desks/chairs, and will be used commonly by the Executive Board members and other staff of specific activity groups.

- ⑤ Each group has its own safe box.
- ⑥ The accounting staff of the Executive Board and each group will receive training in accounting, and other members will receive training in each field of activity.

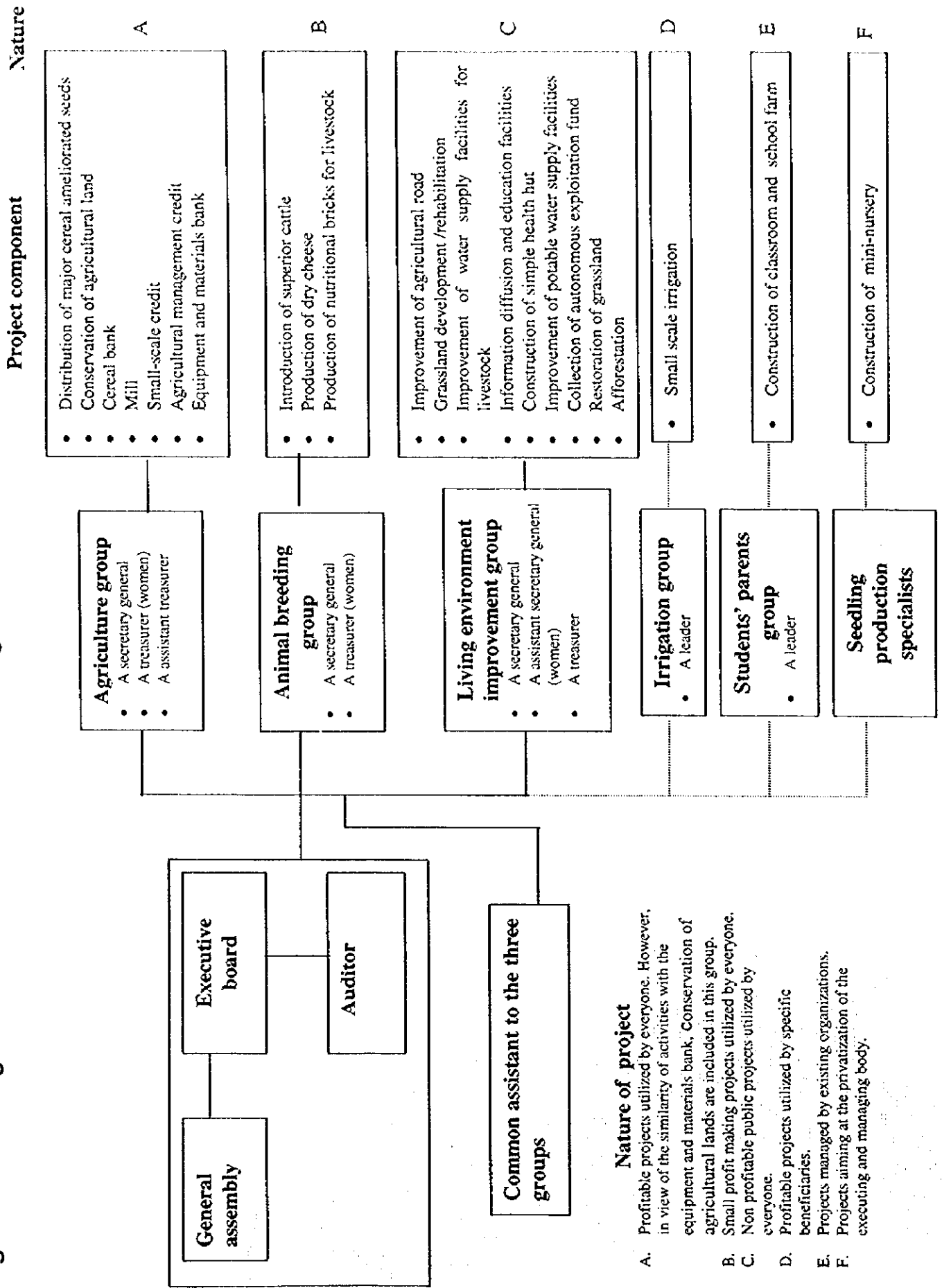
2) Method of execution/management of project by Terroir Management Committee (draft)

The methods of execution /management of project are shown in Table 11.1.4.2 and the function of each specific activity group is shown in Table 11.1.4.3.

3) Method of project evaluation by Terroir Management Committee (draft)

Shown in Table 11.1.4.4.

Figure 11.1.4.1 Organization chart of the terroir management committee (Draft)



Nature of project

- A. Profitable projects utilized by everyone. However, in view of the similarity of activities with the equipment and materials bank, Conservation of agricultural lands are included in this group.
- B. Small profit making projects utilized by everyone.
- C. Non profitable public projects utilized by everyone.
- D. Profitable projects utilized by specific beneficiaries.
- E. Projects managed by existing organizations.
- F. Projects aiming at the privatization of the executing and managing body.

Table 11.1.4.1 STATUTE OF THE TERROIR MANAGEMENT COMMITTEE (DRAFT)

PREAMBLE

Concerned with creating favourable conditions for their physical, intellectual and cultural development and willing to work toward the gradual improvement of the educational, social, cultural, living environment and working conditions, the population of area adhere to the present statute and decide to establish a local Natural Resources Management organisation named terroir management committee.

TITLE I: Naming headquarters establishment, Duration, Goals

Article 1: It is established in the Rural Community of a Local Organisation for Natural Resources Management organisation named "Terroir Management Committee (TMC)". The existence of TMC is unlimited.

Article 2: TMC is apolitical, non-confessional, non-unionist and is a non-profit-making organisation. It serves as a link between the Community and all the external partners concerning Natural Resources Management. It relies on Specific Activity groups (SAGs) to carry out its Natural Resources Management missions.

Article 3: The TMC has its headquarters in and is governed by the present statute.

Article 4: The aim of the TMC is to rationally develop and manage the community natural resources in view of promoting durable development.

TITLE II: VAMC ORGANS

The decision taking, administration, control and execution organs of the TMC are as follows:

- the General Assembly (GA)
- the Executive Board (EB)
- the Auditors
- the Specific Activity Groups (SAGs)

SECTION I : The General Assembly

Article 5: The General Assembly is composed of all the members of the Rural Community who have adhered to the present statute. It is the supreme organ of the TMC and therefore enjoys extended powers in terms of administration and management of the organisation, mainly :

- to determine short, medium and long term orientations
- to adopt the statute and the regulation of the organisation and approve their amendments
- to elect members of the Executive Board in view of implementing the tasks that have been determined
- to decide to adhere to an association or to a collection of associations
- to mandate the Executive Board
- to pronounce the VAMC dissolution

Article 6: The General Assembly holds its ordinary sessions 3 times a year. However it may convene an extraordinary meeting at the request of the Executive Board or of at least 2/3 of its membership. It elects a meeting bureau made up of a chairperson, a vice-chairperson and three secretaries.

The secretarial work will be the responsibility of the three secretaries. Regarding all issues relating to the election and discharge of the Executive Board and the Auditors as well as issues concerning the agenda of the General Assembly, the quorum is reached only when 2/3 of the members are present.

Section II : The Executive Board (EB)

Article 7: the Executive Board is the executive organ of the TMC. In this capacity it is mandated by the General Assembly. It represents the TMC before jurisdictions and third parties.

Article 8: the Executive Board is entrusted with the task of:

- organising and co-ordinating activities geared at generating development in the rural community
- managing water resources in the village area according to the ordinance on water
- conceiving co-ordinating implementing and following up the activities
- supervising the SAGs
- following up and evaluating the programmed activities
- conducting self evaluation activities
- preparing the General Assembly sessions
- representing the TMC with third parties (administrative and customary authorities, co-operation organisations, donors and jurisdictions)

Article 9: The Executive Board is responsible for its management before the General Assembly . It is composed of ten members who are the following:

- one chairperson
- one vice chairperson
- one general secretary
- two assistant secretary general
- one information secretary
- one deputy information secretary
- one general treasurer
- two deputy general treasurers

Article 10: the Executive Board members are elected by the General Assembly . The Executive Board is renewed every 3 years. The former members are eligible for just one term.

SECTION III: AUDIT

Article 11: Two (2) auditors are elected by the General Assembly (outside the Board). The duration of their mandate is determined by the regulation.

Article 12: The two (2) auditors have the responsibility of regularly controlling the E Executive Board and SAGs management and reporting to the General Assembly . In this capacity, they have the mandate to inspect the following items whenever necessary:

- the cash-box book
- the portfolio
- the real property and movable property assets of the TMC
- the exactitude of the information contained in the Executive Board report and every verification that is thought necessary by the General Assembly
- the saving accounts of the rural community
- the projects implementation reports
- the management of subvention from external partners

SECTION IV: THE SPECIFIC ACTIONS GROUPS (SAG)

Article 13: the SAGs are specialised structures of the TMC. They are composed of VAMC members organised around one specific activity

Article 14: SAGs have the responsibility of providing manpower for its members' activities in which have been agreed upon by the TMC.

TITLE III: MEMBERSHIP

Article 15: every individual without any sex or moral discrimination may become member of the TMC provided she/he is a resident of area and has adhered to the present statute. To become a member, one only has to express the intention to the TMC which then notifies the concerned person his/her adhesion

Article 16: The people who have become members of the TMC have to abide by and respect the rules and regulations that govern it.

Article 17: The General Assembly may consider the replacement of a member who has resigned because of a serious misconduct.

In case of voluntary withdrawal, the member cannot pretend being reimbursed his/her contribution.

Article 18: Exclusion

The General Assembly may with a 2/3 majority pronounce the exclusion of a member should she/he seriously fail to honour his/her commitments or commit a major error (cf. regulations). In these conditions, the excluded member cannot claim any compensation.

Article 19: The TMC runs on the strict principle of respect among all its members. They have equal rights and duties. Each of them has in case of a vote one and only one vote in the General Assembly . The quality of being a member is individual (cf. regulations)

TITLE IV: VAMC RESOURCES

Article 20: the resources of the TMC result from :

- subventions
- donations
- legacies
- contributions(autonomous exploitation fund)
- funds put at their disposal by economic and social projects

Article 21: In case of dissolution, the General Assembly charges a committee with the task of taking an inventory of the TMC assets and affecting them to an other organisation or associations pursuing similar or/and charity objectives. They can under no circumstances be subjected to sharing restitution among the member of the TMC.

TITLE V: FINAL AND OTHER DISPOSITIONS.

Article 22: On the basis of a proposal, made by the TMC and accepted by at least 2/3 of the General Assembly, the TMC may become affiliated to an organisation pursuing similar goals.

Article 23: A regulation adopted by the General Assembly will precise the application modalities of the present statute.

Table 11.1.4.2 Method of execution and management of the project (Draft)

Sector	Project component	Type of project	Structure/norm	Execution and management organ	Method of project execution		Method of project management	
					Method of execution	Contribution of population and the method of contribution	Method of management	Utilization fees and the method of collection
Agriculture, stock raising and sylviculture	Distribution of major cereal ameliorated seeds	Producing ameliorated seeds on trust	Ameliorated seeds of millet and sorghum harvested by INRAN and contracted farmers	Agriculture group, contracted farmers	<p>① The project office entrusts farmers with the production of ameliorated original seeds through INRAN.</p> <p>② The project support team gives technical instructions for maintaining the purity of the seeds to the entrusted farmers.</p>	Each farmer purchases the ameliorated seeds in cash.	The agriculture group is in charge of receiving orders from farmers, distributing seeds to farmers and collecting fees from farmers. As the farmers produce their own seeds they do not need to purchase them after the following year.	The price of the original, ameliorated seeds will be fixed by the government under the instruction of the project office. The fees are collected from each farmer at the time of distribution of seeds.
	Conservation of agricultural land	Stone ridge	20 - 40 cm high 40 - 120 cm large 200 m/ha density 50 m of distance Norm: 49 man·day/ ha	Agriculture group	The project office provides the agriculture group with small equipment and a technician. In case of stone cordons, the project office provides a truck to transport stones.	Manpower is provided by the population. The activities are executed by each small group which consists of landowners in the same small basin.	Each landowner pays the agriculture group the utilization fees fixed in view of covering the amortization. Renewal and maintenance every 7 years by the landowners.	Utilization fees/day are fixed by the agriculture group for every small equipment. The user pays the fees for the utilization period to the agriculture group and borrows the equipment. In case of change in the loaned period, payment will be adjusted at the time of restitution.
		Simple eyebrow ridge	10 - 20 cm deep 30 - 40 cm high 4 - 5 m in diameter 1 m in distance 300 half-moons/ha density Norm: 43 man·day/ ha					
		Contour planting of andropogon	10,000 plants/ha 1 m of distance Norm: 40 man·day/ ha				None	
		Zai	20 - 30 cm deep 30 - 40 cm diameter 1 m of distance 10,000 holes/ha density Norm: 40 man·day/ ha				Each landowner pays the agriculture group the utilization fees fixed in view of covering the amortization. Renewal and maintenance every 2 years by the landowners.	

Sector	Project component	Type of project	Structure/norm	Execution and management organ	Method of project execution		Method of project management	
					Method of execution	Contribution of population and the method of contribution	Method of management	Utilization fees and the method of collection
Agriculture, stock raising and sylviculture	Improvement of agricultural roads	Construction of agricultural road Construction of bridge dam	- laterite - earth dam	Living environment improvement group	Method of execution	Contribution of population and the method of contribution	Method of management	Utilization fees and the method of collection
	Small scale irrigation	Field development Installation of irrigation facilities	- weeding out, cutting down trees, digging out roots, cleaning. - installation of pumps in case the depth is over around 6 m, - manual drawing in case the depth is inferior to 6 m	Irrigation group	Method of execution ① The project office determines the suitable lands for irrigation development depending on the number of people wishing to take part in the small scale irrigation scheme and elaborates the cadaster in collaboration with the land commission. ② The project office gives instructions to the participants on vegetable cultivation. ③ After fixing the contribution share of the village, the project office provides equipment and technicians to construct the facilities.	Contribution of population and the method of contribution ① Participants organize an irrigation group. ② All participants provide manpower for the construction of facilities.	Method of management ① The irrigation group establishes the rules of water utilization. ② It fixes contributions in view of covering the amortization, the maintenance and management according to field surfaces. ③ It collects contributions and takes care of maintenance, management and renewal of the facilities. ④ It reimburses its contribution share to the project office.	Utilization fees and the method of collection Contributions are fixed by the irrigation group. Participants pay their contributions after the dry season harvest.
	Improvement of land commission	Cadaster elaboration	Measurement of land and determination of the landowners	Land commission	Method of execution The land commission ; ① determines land limitations with participation of landowners concerned and drives piles showing the limitations. ② makes measurements. ③ measures the area. ④ elaborates the cadaster which mentions the landowner, area etc.	Contribution of population and the method of contribution The terror management committee provides 2 villagers who make arrangements of meeting with the concerned landowners, and take part in the measurement works.	Method of management The land commission and the terror management committee conserve the elaborated cadaster.	Utilization fees and the method of collection None

Sector	Project component	Type of project	Structure/norm	Execution and management organ	Method of project execution		Method of project management	
					Method of execution	Contribution of population and the method of contribution	Method of management	Utilization fees and the method of collection
	Improvement of livestock	Introduction of superior cattle	<ul style="list-style-type: none"> - sire bulls - superior cows 	Animal breeding group	The project office provides the animal breeding group with superior cattle in accordance with the request.	The animal breeding group reserves the fertilization fees and returns the cost of cattle to the project office. The fertilization fees can be paid in the form of newborn calf instead of cash.	The animal breeding group fixes the fertilization fees to the project office and the salary to the cattle keeper are paid from the reserved fertilization fees.	The fertilization fee is estimated at 1,300CFA/head. The user pays the fertilization fee to the animal breeding group when fertilization is executed.
Agriculture, stock raising and and silviculture	Improvement of fodder production infrastructure	Grassland development/rehabilitation	<ul style="list-style-type: none"> - Land preparation (utilization of machines) - Seeding of ameliorated grass seeds - Construction of protection fences (barbed wire) 	Living environment improvement group	The project office prepares grass lands with machines. The project office provides grass seeds and materials of protection fences.	The living environment improvement group mobilizes the population to provide manpower for the seeding and the construction of protection fences. The contribution share of the village is paid from the autonomous exploitation fund.	The living environment improvement group mobilizes the population and undertakes : <ul style="list-style-type: none"> ① the periodic repair operations of protection fences (once/year). ② Periodic renewal of grasslands (once every 8-10 years). ③ Executing of enclosure of livestock the year before renewal. 	Manpower will be provided in accordance with the needs by the population. The beneficiaries will pay 10 CFA / animal . utilization to the living environment improvement group.
		Production of nutritional bricks for livestock	<ul style="list-style-type: none"> - small equipment (buckets, barrels, bowls etc.) - materiel (area, salt, cement) 	Animal breeding group	The project trains the members of the animal breeding group and provides equipment and materials.	The animal breeding group requests provision of materials from the project office.	The animal breeding group fixes the utilization fees in view of covering the amortization and the cost of materials.	The user pays the utilization fee to the animal breeding group when using the equipment and materials.
	Improvement of water supply facilities for livestock	Pond rehabilitation	Dredging	Living environment improvement group	The project office provides equipment, materials and technicians.	The living environment improvement group mobilizes the population to provide manpower. The contribution share of the village is paid from the autonomous exploitation fund.	The living environment improvement group takes care of the management and maintenance expenses through the autonomous exploitation fund.	None

Sector	Project component	Type of project	Structure/norm	Execution and management organ	Method of project execution		Method of project management	
					Method of execution	Contribution of population and the method of contribution	Method of management	Utilization fees and the method of collection
Improvement of livestock product distribution	Production of dry cheese		<ul style="list-style-type: none"> - mud building 30 m² - steel framework - reed screen - steel reservoir - bored plate - small equipment (buckets, liters, mixers etc.) 	Animal breeding group	The project office trains the members of the animal breeding group and provides equipment and materials.	The animal breeding group mobilizes the population for the construction of the mud building.	The animal breeding group fixes the utilization fees in view of covering the amortization.	The user pays the utilization fee to the animal breeding group when using the equipment.
	Seedling production	Mini-nurseries Community forest	<ul style="list-style-type: none"> - warehouse - fence - well - reproduction equipment and materials 	Seedling production specialists	The project office constructs a mini-nurseries. It provides the seedling production specialists with necessary equipment, materials and technical instructions.	None	The seedling producers fixes the seedling under the instruction of the project office. The seedling producers produces less than 5,000 seedlings a year receiving orders from the population with the assistance of the project office. During the project implementation period, the project office covers the necessary expenses and trains the seedling production specialists to facilitate privatization.	The seedling fee is estimated at 1,35 CFA /unit. The fees are directly paid to the seedling production specialists.
Improvement of Agriculture, stock raising and sylviculture support system	Agriculture, stock raising and sylviculture support	Cereal bank	<ul style="list-style-type: none"> - millet depot (48 m²) - millet 	Agriculture group	The project office builds the millet depot. For the capital, the project office provides 400 sacks of millet	The agriculture group mobilizes the population to construct the millet depot.	The agriculture group operates loans in cash and in kind. Loan in kind : it lends 1 sack against 1,500 CFA guarantee and collects 1 sack after the harvest. Loan in cash : it lends 7,500 CFA and collects 1 sack after the harvest.	In case of loan in kind: 1,500 CFA / sack. In case of loan in cash: the difference between the market price and 7,500 CFA /sack.
		Mill	<ul style="list-style-type: none"> - concrete workshop (16m²) - simple grinding mill 	Agriculture group	The project office constructs a workshop and provide a mill including the installation expenses.	The agriculture group mobilizes the population to construct the workshop. Part of the purchase price of the mill is paid by women.	The agriculture group employs an mill operator who is in charge of the operating and management the mill. The agriculture group fixes the utilization fees in view of covering the amortization of the mill, fuel expenses, the salary of the mill operator as well as repair and reserve expenses.	The utilization fee is estimated at 25 CFA /t (2.5 kg) and is collected by the mill operator.

Sector	Project component	Type of project	Structure/norm	Execution and management organ	Method of project execution		Method of project management	
					Method of execution	Contribution of population and the method of contribution	Method of management	Utilization fees and the method of collection
		Small scale credit	Capital	Agriculture group	The project office lends a capital money to the agriculture group.	The agriculture group reimburses the capital money within 5 years to the project office.	In principle the financing is destined to women. The agriculture group determines conditions of loan. The agriculture group examines the financing plan of the requester and makes the financing decision. The content of the request and the reasons behind the financing decision will be listed and reported to the periodic general assembly meeting of the terror management committee. The financing needs a solidarity guarantee.	Interest rate : 10% the loan term does not exceed 6 months
		Agricultural management credit	Capital	Agriculture group	The project office lends a capital money to the agriculture group.	The agriculture group reimburses the capital money within 5 years to the project office.	The agriculture group determines conditions of loan. The agriculture group examines the financing plan of the requester and makes the financing decision. The content of the request and the reasons behind the financing decision will be listed and reported to the periodic general assembly meeting of the terror management committee. The financing needs a solidarity guarantee.	The monthly interest: 2% for short term loan less than a year and 1% for long term loan for 1-5 years.
		Equipment and materials bank	<ul style="list-style-type: none"> - shelter (50 m²) - improved agricultural tools - carts - 3 wheel carts - other agricultural equipment (shovels, pickaxes, carts etc.) 	Agriculture group	The project constructs the shelter. It takes responsibility for the equipment and materials costs.	The agriculture group mobilizes the population to construct the shelter.	The agriculture group fixes the utilization fees of each in view of covering cover the amortization and lend them to the user.	Utilization fees/day are fixed by the agriculture group for every equipment. The user pays the fees for the utilization period to the agriculture group and borrows the equipment. In case of change in the loaned period, payment will be adjusted at the time of restitution.

Sector	Project component	Type of project	Structure/horn	Execution and management organ	Method of project execution		Method of project management	
					Method of execution	Contribution of population and the method of contribution	Method of management	Utilization fees and the method of collection
Living environment improvement	Improvement of potable water supply facilities	Modern deep wells Construction of wells Rehabilitation of wells	- modern deep wells - construction of wells - rehabilitation of wells	Living environment improvement group	The project office provides materials, equipment and technicians for the construction.	The living environment improvement group mobilizes the population to provide manpower.	The living environment improvement group fixes the utilization fees in view of covering amortization, maintenance and management expenses and collects them.	The living environment improvement group will collect 5 CFA /two buckets of water as the utilization fees.
	Information diffusion and education facilities	Installation of a TV	- solar power generator - a TV	Living environment improvement group	The project office provides materials, equipment and technicians for the construction.	The contribution share of the village is paid from the autonomous exploitation fund.	The living environment improvement group takes care of the management and maintenance expenses through the autonomous exploitation fund.	None
	Improvement of health and hygiene	Simple health hut	- simple health hut - first aid pharmaceutical products - training of a midwife and a pharmaceutical products manager	Living environment improvement group	The project office provides a set of pharmaceutical products. The project office shoulders the necessary expenses and dispatch a midwife and a pharmaceutical products manager to a hospital nearby for medical training.	The living environment improvement group mobilizes the population to provide manpower for the construction of the simple health hut. The living environment improvement group selects a midwife and a pharmaceutical products manager among the village population.	The pharmaceutical products manager renews the pharmaceutical products with the collected utilization fees. The living environment improvement group supervises the conditions of use, renewal of pharmaceutical products and of his money management.	1,000 CFA/ utilization is paid to the pharmaceutical products manager. 500 CFA/examination or 3,000 CFA/delivery is paid to the midwife.
Improvement of education	Improvement of classroom	Construction of classroom	- classroom - teacher	Students' parents group	The project office provides equipment, materials and technicians to construct the classrooms and a well. The government arranges the teachers.	The existing students' parents mobilizes the population necessary to provide manpower for the construction of classrooms and a well. The representative of the students parents' group trains the students in gardening.	The representative of the students' parents group will have the responsibility of training students in gardening, selling vegetables and allocating the profit money after deducting the expenses to the school maintenance and management.	None
	Construction of school farm	Construction of school farm	- well - farm - agricultural materials					

Sector	Project component	Type of project	Structure/norm	Execution and management organ	Method of project execution		Method of project management	
					Method of execution	Contribution of population and the method of contribution	Method of management	Utilization fees and the method of collection
Living environment improvement	Collection of autonomous exploitation fund	Fund for the initial contribution of the village to the project and for the maintenance and management of non-profitable public projects benefit everyone in the village	<ul style="list-style-type: none"> - books for the registration of the members of the terror management committee - stationery 	Living environment improvement group	The project office provides the living environment improvement group with the necessary equipment.	The living environment improvement group makes registration of the population. It will then collect 1,000 CFA/head-year from each family and reserves them in the autonomous exploitation fund.	The living environment improvement group reserves the collected money and pays necessary expenses from it for public purposes.	1,000 CFA/head-year (500 CFA x 2times/year) People who cannot pay in cash will pay an equivalent quantity of millet, or equivalent to 5 days work in addition to the common work.
Environment conservation	Conservation of soil	Reforestation of grassland (Plowing)	0.15 m deep 3 ha/hour utilization of tractor with ripping accessories	Living environment improvement group	The terror management committee addresses an implementation request to the local administrative authorities.	The living environment improvement group mobilizes the population to clear impurities.	The terror management committee regulates the land use by the population. In case land recovery is insufficient, the local administrative authorities will undertake the rehabilitation after 3 years.	None
		Reforestation	<ul style="list-style-type: none"> - firewood forest - protection fence 	Living environment improvement group	The project office provides necessary equipment and buys seedlings for reforestation from the seedling producers.	The living environment improvement group mobilizes the population to build the fence and plant trees.	The living environment improvement group establishes the utilization plan and manages the firewood forest. The living environment improvement group buys seedlings for reforestation from the seedling producers with the selling profit after the first planted trees are enough grown for sale.	The selling profit is allocated to the maintenance and management of the firewood forest.

Table 11.1.4.3 Function of each specific activity group

Name of the specific activity group	Staff	Type of the project	Competence	Component	
Agriculture group	A secretary general A treasurer (woman) A assistant treasurer	Distribution of major cereal ameliorated seeds	1.Registration of farmers who wish to produce or use the ameliorated seeds.	The agriculture group registers the name of the farmers who wishes to produce or use ameliorated seeds and the necessary quantity of seeds.	
			2.Report to the project office	The agriculture group reports the registration to the project office.	
			3.Distribution of seeds to the farmers and collection of the fees	The agriculture group distributes the ameliorated seeds to the farmers and collects the fees.	
			4.Payment of the collected fees to the project office	The agriculture group pays the collected fees to the project office.	
	Conservation of agricultural land Equipment and materials bank			1.Consultation with the project office	The agriculture group consults with the project office on the types and quantities of necessary equipment to be provided and the contribution share of the village.
				2.Arrangement of money for the share of the village	The agriculture group asks the living environment improvement group to pay the initial contribution of the village for the purchase of the equipment.
				3.Fixing of the equipment utilization fees	The agriculture group fixes the daily renting fees of the equipment in view of covering the amortization.
				4.Loans of equipment and materials and collection of the fees	The agriculture group records the name of the borrower, the name of loaned equipment and the loaned duration and collects the utilization fee from the borrower. In case of change in the loaned period, payment is adjusted at the time of restitution. When equipment are needed for the contribution works of the village, the agriculture group lends necessary equipment to concerned specific activity group for free.
				5.Safekeeping of collected fees	The agriculture group keeps the collected fees in its own cash box.
				6.Safekeeping and renewal of equipment	The agriculture group keeps the equipment under its custody and renews the obsolete equipment which is in a bad condition.
				7.Mobilization of the population	The agriculture group mobilizes the population to construct a shelter.
				8. Periodic activity report	The agriculture group elaborates reports which are submitted to the general assembly by the executive board.
	Cereal bank			1.Consultation with the project office	The agriculture group consults with the project office on the installations plan and the contribution share of the village.
				2.Fixing of conditions of loans	The agriculture group determines the conditions of loans both in kind and in cash.
3.Execution of the loan				The agriculture group executes loan activities of recording the name of the borrower, the type and amount of loan, and of handling money and cereals.	
4.Safekeeping of transaction money				The agriculture group keeps the transaction money in its own cash box.	

Name of the specific activity group	Staff	Type of the project	Competence	Component
			5. Mobilization of the population. 6. Purchase of millet	The agriculture group mobilizes the population to construct a millet depot. The agriculture group purchases millet considering the market price fluctuation.
			7. Management of millet 8. Periodic activity report	The agriculture group keeps the millet in the depot. The agriculture group elaborates reports which are submitted to the general assembly by the executive board.
	Mill		1. Consultation with the project office 2. Arrangement of money for the purchase of a milling machine 3. Employment and supervision of the personnel in charge of operating and managing the mill and payment of the salary 4. Fixing of utilization fees 5. Collection of utilization fees 6. Safekeeping of collected fees 7. Renewal of milling machine 8. Mobilization of the population 9. Periodic activity report	The agriculture group consults with the project office on the installation plan and the type of the milling machine. Women will contribute 10% of the milling machine's cost. The agriculture group pays the women's contribution for the purchase of the milling machine to the project office from its own cash box. The agriculture group employs a mill operator who is in charge of the operation and maintenance of the mill, supervises him and pay him the salary. His monthly salary is estimated at 1,500 CFA and is paid by women. This amount shall be discussed at the time of implementation of the project. The agriculture group fixes the grinding fees estimated at 25 CFA/tia (equal to 2.5 kg). The grinding fees will serve to cover amortization, fuel, mill operator's salary and repair expenses. The agriculture group receives the utilization fees which the mill operator collects from the users at the time of grinding operation. The agriculture group keeps the collected utilization fees in its own cash box. The agriculture group renews the obsolete milling machine which are in a bad condition with the reserved utilization fees. The agriculture group mobilizes the population to construct a workshop. The agriculture group elaborates reports which are submitted to the general assembly by the executive board.
		Small scale credit Agricultural management credit	1. Fixing the credit conditions 2. Consultation with the project office 3. Safekeeping of the initial funds 4. Decision making on provision of credit 5. Credit provision	The agriculture group fixes the activities suitable for credit and the conditions of credit. The agriculture group consults with the project office on the amount of the initial fund and its reimbursement conditions. The agriculture group keeps the initial fund paid by the project office under its custody in its cash box. The agriculture group examines requests of credit submitted from the debtor and makes a financing decision. The agriculture group establishes a statement in 2 copies mentioning the deadlines and the amounts to be reimbursed and gives a copy and the accepted amount of money to the debtor.

Name of the specific activity group	Staff	Type of the project	Competence	Component
			<p>6.Safekeeping of the reimbursed money</p> <p>7.Reimbursement to the project office</p> <p>8.Periodic activities report</p>	<p>The agriculture group keeps the reimbursed money in its own cash box.</p> <p>The agriculture group reimburses the project office 10% of the initial fund during the first 2 years, 20% during the 3rd year and 30% during the 4th and 5th years.</p> <p>The agriculture group elaborates reports which are submitted to the general assembly by the executive board.</p>
Animal breeding group	A secretary general A treasurer(woman)	Introduction of superior cattle	<p>1.Consultation with the project office</p> <p>2.Employment of a cattle keeper</p> <p>3.Fixing the fertilization fees</p> <p>4.Collection of the fertilization fees</p> <p>5.Safekeeping of the fertilization fees</p> <p>6.Reimbursement to the project office</p> <p>7. Periodic activities report</p>	<p>The animal breeding group consults with the project office on race and number of cattle to be introduced and the reimbursement conditions.</p> <p>The animal breeding group employs a cattle keeper.</p> <p>The animal breeding group fixes the fertilization fees in view of covering the prices of cattle and the salary of the cattle keeper.</p> <p>The animal breeding group collects the fertilization fees from the beneficiaries and gives orders of executing fertilization to the cattle keeper. In case the fertilization fee is paid in the form of newborn calf, the cattle keeper raises it to be grown for sale.</p> <p>The animal breeding group keeps the collected fertilization fees in its own cash box.</p> <p>The animal breeding group reimburses the cost of the cattle to the project office.</p> <p>The animal breeding group elaborates reports which are submitted to the general assembly by the executive board.</p>
		Production of dry cheese Production of nutritional bricks for livestock	<p>1.Acquisition of the production techniques</p> <p>2.Consultation with the project office</p> <p>3.Fixing of the equipment and materials utilization fees</p> <p>4.Collection of utilization fees</p> <p>5.Safekeeping of collected fees</p> <p>6. Technical orientation of the population</p> <p>7.Safekeeping and renewal of equipment</p> <p>8.Periodic activities report</p>	<p>The animal breeding group acquires the production techniques receiving a training organized by the project office.</p> <p>The animal breeding group consults with the project office on the installation plan and the contribution share of the village.</p> <p>The animal breeding group fixes the utilization fees of the equipment and materials in view of covering the amortization.</p> <p>The animal breeding group collects the utilization fees of the equipment and materials depending on the quantity of production.</p> <p>The animal breeding group keeps the collected utilization fees in its own cash box.</p> <p>The animal breeding group provides the population with technical instructions for the production.</p> <p>The animal breeding group keeps the equipment under its custody and renews the obsolete equipment which are in a bad condition with the reserved utilization fees.</p> <p>The animal breeding group elaborates reports which are submitted to the general assembly by the executive board.</p>

Name of the specific activity group	Staff	Type of the project	Competence	Component	
Living environment improvement group	A secretary general A assistant secretary general (woman) A treasurer	Improvement of agricultural road	1. Examination of the conditions of agricultural roads	The living environment improvement group makes a tour to examine the conditions of agricultural roads after the rainy seasons and takes note of the portion to be repaired.	
			2. Consultation with the project office	The living environment improvement group consults with the project office on the repair plan and the contribution share of the village.	
			3. presentation of repair requests to the local administrative authorities	The living environment improvement group presents requests of repair to the local administrative authorities when major damages occur.	
			4. Mobilization of the population	The living environment improvement group mobilizes the population to repair agricultural roads.	
			5. Arrangement of necessary expenses	The living environment improvement group pays necessary expenses through the autonomous exploitation fund.	
			6. Periodic activities report	The living environment improvement group elaborates reports which are submitted to the general assembly by the executive board.	
		Grassland development/rehabilitation		1. Consultation with the project office	The living environment improvement group consults with the project office on the development plan and the contribution share of the village.
				2. Payment of the contribution share of the village	The living environment improvement group pays the contribution share of the village through the autonomous exploitation fund.
				3. Employment of a guard	The living environment improvement group employs a guard who collects utilization fees of the grassland.
				4. Fixing of the grassland utilization fees	The living environment improvement group fixes the grassland utilization fees per head by race.
5. Collection of utilization fees	The living environment improvement group collects the grassland utilization fees and keeps them in its own cash box.				
6. Maintenance of the grassland	The living environment improvement group maintains the grassland with the manpower of the population, or with the payment through the autonomous exploitation fund.				
7. Mobilization of the population	The living environment improvement group mobilizes the population to repair the grassland and execute the enclosure of livestock.				
8. Periodic activities report	The living environment improvement group elaborates reports which are submitted to the general assembly by the executive board.				
Improvement of water supply facilities for livestock		1. Consultation with the project office	The living environment improvement group consults with the project office on the installation plan and the contribution share of the village.		
		2. Payment of the contribution share of the village	The living environment improvement group pays the contribution share of the village through the autonomous exploitation fund.		
		3. Maintenance of the installations	The living environment improvement group maintains the installations with the manpower of the population, or with the payment through the autonomous exploitation fund.		

Name of the specific activity group	Staff	Type of the project	Competence	Component
		<p>Construction of simple health hut</p>	<p>4. Mobilization of the population</p> <p>5. Periodic activities report</p> <p>1. Consultation with the project office</p> <p>2. Payment of the contribution share of the village</p> <p>3. Selection of a midwife and a pharmaceutical products manager</p> <p>4. Fixing the utilization fees of the first aid pharmaceutical products, medical examination fees and delivery fees</p> <p>5. Supervision of the safekeeping condition of the collected fees</p> <p>6. Supervision of the supply condition of the first aid pharmaceutical products</p> <p>7. Mobilization of the population</p> <p>8. Periodic activities report</p>	<p>The living environment improvement group mobilizes the population to maintain the installations.</p> <p>The living environment improvement group elaborates reports which are submitted to the general assembly by the executive board.</p> <p>The living environment improvement group consults with the project office on the kind and quantity of first aid pharmaceutical products to be provided and the contribution share of the village.</p> <p>The living environment improvement group pays the contribution share of the village through the autonomous exploitation fund.</p> <p>The living environment improvement group selects a midwife candidate and a pharmaceutical products manager candidate who receive a medical training out of the population.</p> <p>The living environment improvement group fixes the utilization fees of the first aid pharmaceutical products, medical examination fees and delivery fees through consultations with the midwife and the pharmaceutical products manager.</p> <p>The living environment improvement group supervises the safekeeping conditions of the collected fees managed by the pharmaceutical products manager.</p> <p>The living environment improvement group supervises the supply condition of the first aid pharmaceutical products managed by the pharmaceutical products manager.</p> <p>The living environment improvement group mobilizes the population to construct of a simple health hut.</p> <p>The living environment improvement group elaborates reports which are submitted to the general assembly by the executive board.</p>
		<p>Collection of autonomous exploitation fund</p>	<p>1. Fixing the amount of contribution to the autonomous exploitation fund</p> <p>2. Collection of the contribution</p> <p>3. Safekeeping of the contributions</p> <p>4. Payment of the initial contribution share of the village to the project office</p>	<p>The living environment improvement group fixes the amount of contribution per person to the autonomous exploitation fund. It also fixes the conditions of contribution which is not paid in cash, but in kind in terms of millet or service.</p> <p>The living environment improvement group collects the contributions from the population and notes them in a register, person.</p> <p>The living environment improvement group keeps the collected fees in its own cashbox as a autonomous exploitation fund.</p> <p>The living environment improvement group pays the initial contribution share of the village to the project office through the autonomous exploitation fund in accordance with request of chairperson of each specific activity group.</p>

Name of the specific activity group	Staff	Type of the project	Competence	Component
			<p>5. Payment of the management and maintenance expenses of public projects</p> <p>6. Revision of the contribution</p> <p>7. periodic activities report</p>	<p>The living environment improvement group pays the management and maintenance expenses of public non profit making projects by which everyone in the village is benefited.</p> <p>When expenses become limited to the management and maintenance of the public projects after the implementation of projects, the living environment improvement group may revise the contribution amount based on the total annual expenses.</p> <p>The living environment improvement group elaborates reports which are submitted to the general assembly by the executive board.</p>
		Soil preservation (Plowing)	1. Mobilization of the population	The living environment improvement group mobilizes the population to clear impurities.
		Soil preservation (Afforestation)	2. periodic activities report	The living environment improvement group elaborates reports which are submitted to the general assembly by the executive board.
			1. Establishment of utilization and management plans of firewood forest	The living environment improvement group establishes plans of tree cutting and planting in the firewood forest.
			2. Consultation with the project office	The living environment improvement group consults with the project office on the varieties, the quantity, necessary equipment and the contribution share of the village.
			3. Mobilization of the population	The living environment improvement group mobilizes the population to construct protection fences and plant trees.
			4. Firewood selling	The living environment improvement group cuts and sells planted trees as firewood after they are enough grown for sale.
			5. Safekeeping of sales	The living environment improvement group keeps the sales profit in its own cash box.
			6. Purchase of seedlings	The living environment improvement group purchases seedlings for reforestation from the seedling producers with the sales profit of the firewood.
			7. periodic activities report	The living environment improvement group elaborates reports which are submitted to the general assembly by the executive board.
Irrigation group	A leader	Small scale irrigation	1. Registration of interested farmers	The irrigation group registers farmers who are interested in the small scale irrigation scheme.
			2. Consultation with the project office	The irrigation group consults with the project office on the installation plan, the contribution share of the group and the reimbursement conditions.
			3. Assistance to the establishment of the cadaster	The irrigation group assists the land commission in establishing cadasters of the concerned lands.
			4. Discussion with the landowners and land users	The irrigation group consults and makes agreements with concerned landowners and land users on the development of land.

Name of the specific activity group	Staff	Type of the project	Competence	Component
			<p>5. Identification of participants in the small scale irrigation scheme</p> <p>6. Mobilization of the participants</p> <p>7. Distribution of cultivation plots</p> <p>8. Establishment of water use regulation</p> <p>9. Fixing of contribution</p> <p>10. Collection of the contributions</p> <p>11. Safekeeping of the collected contributions</p> <p>12. Reimbursement of the contribution share of the group</p> <p>13. Management and maintenance of irrigation installations</p> <p>14. periodic activities report</p>	<p>The irrigation group determines the participants and the number will be determined in conformity with the installation plan.</p> <p>The irrigation group mobilizes the participants to contribute the necessary manpower for the installation works.</p> <p>The irrigation group distributes the cultivation plots to the participants.</p> <p>The irrigation group establishes a regulation of water use.</p> <p>The irrigation group in collaboration with the project office fixes the contribution amount per surface which covers the amortization of the installations, the maintenance and management and the reimbursement of the contribution share of the group.</p> <p>The irrigation group collects contributions from each participant depending on the surface after the dry season harvest.</p> <p>The irrigation group keeps the collected contributions in its own cash-box.</p> <p>The irrigation group reimburses the contribution share of the group to the project office from the reserved contributions.</p> <p>The irrigation group is in charge of the maintenance and the management of the irrigation installations with the reserved contributions.</p> <p>The irrigation group elaborates reports which are submitted to the general assembly by the executive board.</p>
Students' parents group	A leader	Construction of classroom Construction of school farm	<p>1. Consultation with the project office</p> <p>2. Mobilization of students' parents</p> <p>3. Financial arrangement for installation or rehabilitation of school infrastructures</p> <p>4. Presentation of request of arranging teachers</p> <p>5. Assignment of a farming teacher</p> <p>6. Vegetables selling</p>	<p>The students' parents group consults with the project office on the installation plan and the contribution share of the group.</p> <p>The students' parents group mobilizes the students' parents to construct classrooms and a school farm.</p> <p>In case financial arrangements are necessary for the installation or rehabilitation of school infrastructures, the students' parents group requests the expense from the autonomous exploitation fund from the living environment improvement group.</p> <p>The students' parents group presents a request of arranging teachers to the government.</p> <p>The students' parents group assigns a students' parent for the farming teacher.</p> <p>The students' parents group sells the vegetables cultivated through practical farming lessons.</p>

Name of the specific activity group	Staff	Type of the project	Competence	Component
			7. Safekeeping of the profit	The students' parents group keeps the profit money after deduction of the necessary expenses in its own cash box so as to allocate to the school maintenance and management expenses.
Seedling production specialists	Seedling production specialists	Construction of mini-nursery community forest	8. periodic activities report 1. Identification of needed variety and quantity of trees to the population 2. Receiving orders of seedlings 3. Seedlings production 4. autonomy of the seedling producers 5. periodic activities report	The students' parents group elaborates reports which are submitted to the general assembly by the executive board. The seedling producers undertake a study to identify variety and quantity of trees needed to the population in collaboration with the project office. The seedling producers receive orders of seedlings from the population. The seedling producers produce the seedlings with the technical and financial support of the project office. The seedling producers will acquire the self-management capabilities and technical know-how of the nursery until the end of the project. The seedling producers elaborate reports which are submitted to the general assembly by the executive board.

Table 11.1.4.4 Evaluation chart of project (Draft)

① Evaluation of the project construction method

Name of project installations	A	B	C	D, etc.
Construction method	good fair bad	good fair bad	good fair bad	good fair bad
Reasons				
Improvement measures				

② Evaluation of the functions of project installations

Name of project installations	A	B	C	D, etc.
Function	good fair bad	good fair bad	good fair bad	good fair bad
Reasons				
Improvement measures				

③ Evaluation of the managing method of project installations

Name of project installations	A	B	C	D, etc.
Managing method	good fair bad	good fair bad	good fair bad	good fair bad
Reasons				
Improvement measures				

④ Evaluation of organizations of the terroir management committee

Name of organization	General assembly	Executive board	Auditor	Agriculture group
Function	good fair bad	good fair bad	good fair bad	good fair bad
Reasons				
Improvement measures				

Animal breeding group	Living environment improvement group	Irrigation group	Students' parents group	Seedling production specialists
good fair bad	good fair bad	good fair bad	good fair bad	good fair bad

11.2 Maintenance and management plan

The maintenance system following the 15 years implementation period of the Development Basic Plan (Master Plan) shall be as follows.

Of the facilities and projects which belong to the village, those which can produce benefits based on the effort of the residents and are of a public nature will continue to be maintained mainly by each relevant specific activity group of a Terroir Management Committee, and those which belong to individual farmers will be maintained by individual farmers.

With respect to those projects which restore the existing facilities or construct new facilities of the central government or local governments enjoying the technical assistance, facilities will be transferred to respective government agencies upon completion.

It is the responsibility of the central government and the local governments to continue to provide various supports according to respective development phases of living standards of residents, agricultural production level, etc. Accordingly, it is assumed that each project will be implemented continuously according to the necessity, and the transferred facilities will be utilized effectively under good management. Table 11.2.1 shows a list of maintenance organizations expected to be functioning after the project implementation period.

Table 11.2.1 List of maintenance organizations after the project implementation period

☉ : Maintenance Organization
 ○ : Maintenance support organization (technology and budget)

Area • Name of the Plan	Maintenance Organization					Name of organization	Remarks
	① Project office	② Government agency	③ Terroir management (village)	④ Individual farmer	⑤ Others		
1. Agriculture, stock raising and sylviculture improvement plan							
1) Agriculture						Name of ☉	Name of ○
(1) Major cereal ameliorated seeds distribution				☉		Reproduction of seeds by individual	
Seed center improvement							
Seed plot accommodation (millet)							
Seed plot accommodation (sorghum)							
Conservation of agricultural land							
stone ridge			○	○		Individual farmers	Agricultural group
Contour planting of andropogon			○	○		Individual farmers	Agricultural group
Zai			○	○		Individual farmers	Agricultural group
Simple eyebrow ridge			○	○		Individual farmers	Agricultural group
(3) Improvement of agricultural roads		○				Living environment improvement group	Public project bureau, district office
Agricultural roads		○				Living environment improvement group	Public project bureau, district office
Koris crossing works							
(4) Restoration of large-scale irrigation facilities							
Restoration of large-scale irrigation facilities		☉				ONAHA, Rice farmers' cooperative	
(5) Improvement of small-scale irrigation facilities							
Field development			○			Irrigation group	
Small dam construction			○			Living environment improvement group	
Pond restoration (Téra)							
Pond development (Fimkéué)			○			Living environment improvement group	
Pond development (Qualam)			○			Living environment improvement group	
Pond development (Téra)			○			Living environment improvement group	
(6) Improvement of distribution of agricultural							
(1) Improvement of market management system		○				Ministry of Agriculture and Livestock, Financial Management Bureau	
Office improvement							
Information gathering (Tillabéri city, Niamey city)		○				Tillabéri city, Niamey city	

Information gathering (Niger as a whole)							Ministry of Agriculture and Livestock, Agricultural Bureau	
(2) Collecting shipping facilities improvement model project							Irrigation group	
Collecting shipping facilities improvement								
(7) Improvement of land commission								Land commission (District)
Cadaster elaboration								
2) Livestock								
(1) Improvement of livestock								
Livestock improvement center							Toukounous ranch	
Introduction of sire bulls							Animal breeding group	
Introduction of superior cows							Animal breeding group	
(2) Improvement of fodder production infrastructure								
Grassland development							Livestock environment improvement group	
Grassland rehabilitation							Livestock environment improvement group	
Livestock nutritional brick production facilities							Animal breeding	
(3) Improvement of water supply facilities for livestock								
Rehabilitation of deep wells (60m)							Livestock environment improvement group	
Rehabilitation of wells (30m)							Livestock environment improvement group	
Construction of new wells (30m)							Livestock environment improvement group	
(4) Improvement of animal hygiene								
Livestock veterinary center							Departmental stockbreeding industry bureau (DDEIA), district service	
Livestock capture facilities							Departmental stockbreeding industry bureau (DDEIA), district service	
(5) Improvement of livestock management facilities								
Model dairy farm							Individual farmers	
Bee keeping farmer							Individual farmers	
(6) Improvement of livestock product distribution								
Fresh milk collecting shipping facilities							Animal breeding	
Dry cheese production facilities							Animal breeding	
Yogurt production facilities							Animal breeding	

11.3 Period of project implementation and allocation of projects

(1) Preparation period

The Development Basic Plan (Master Plan) to be started in 2000 shall be designed in further detailed and the fund to be mobilized during 1999, and be implemented afterward in turn according to the order of priority.

(2) Implementation period

The implementation period shall be 15 years from 2000 through 2014, divided into three five year terms, the first, the middle and the last. Each project shall be implemented according to its project schedule, provided that the priority project referred to in Chapter 9 shall be implemented in the first term onward (See Figure 11.3.1).

Figure 11.3.1 Project implementation schedule

Area/Name of the Plan	First term					Middle term					Last term				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Agriculture, stock raising and silviculture improvement plan															
1) Agriculture															
(1) Major cereal ameliorated seeds distribution plan															
Improvement of the seed center	█														
Seed plot accommodation (millet)		█	█	█	█	█									
Seed plot accommodation (sorghum)			█	█	█	█									
Distribution of ameliorated seeds (millet)			█	█	█	█									
Distribution of ameliorated seeds (sorghum)				█	█	█									
(2) Conservation of agricultural land															
Stone ridge	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Contour planting of andropogon	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Zai	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Simple eyebrow ridge	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
(3) Improvement of agricultural roads															
Agricultural roads	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Koris crossing work	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
(4) Rehabilitation of large-scale irrigation facilities															
Rehabilitation of large-scale irrigation facilities	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
(5) Improvement of small-scale irrigation facilities															
Field development	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Small dam construction	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Pond rehabilitation (Téra)		█	█	█	█	█	█	█	█	█	█	█	█	█	█
Pond development (Filingué)			█	█	█	█	█	█	█	█	█	█	█	█	█
Pond development (Ouallam)				█	█	█	█	█	█	█	█	█	█	█	█
Pond development (Téra)					█	█	█	█	█	█	█	█	█	█	█
(6) Improvement of distribution of agricultural products															
① Improvement of market management system															
Office improvement	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Information gathering (Tillabéri city, Niamey city)	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Information gathering (Niger as a whole)	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
② Model project for improvement of collecting shipping facilities															
Improvement of collecting shipping facilities	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
(7) Improvement of land commission															
Cadastral elaboration	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
2) Livestock															
(1) Improvement of livestock															
Livestock improvement center	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Introduction of superior cattle	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
(2) Improvement of fodder production infrastructure															
Grassland development	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Grassland rehabilitation	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Livestock nutritional block production facilities	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
(3) Improvement of water supply facilities for livestock															
Rehabilitation of deep wells (60m deep)	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Rehabilitation of wells (30m deep)	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Construction of new wells (30m deep)	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Rehabilitation of ponds	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
(4) Improvement of animal hygiene															
Livestock veterinary center	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Livestock capture facilities	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
(5) Improvement of livestock management facilities															
Model dairy farm	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Beekeeping farmer	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█

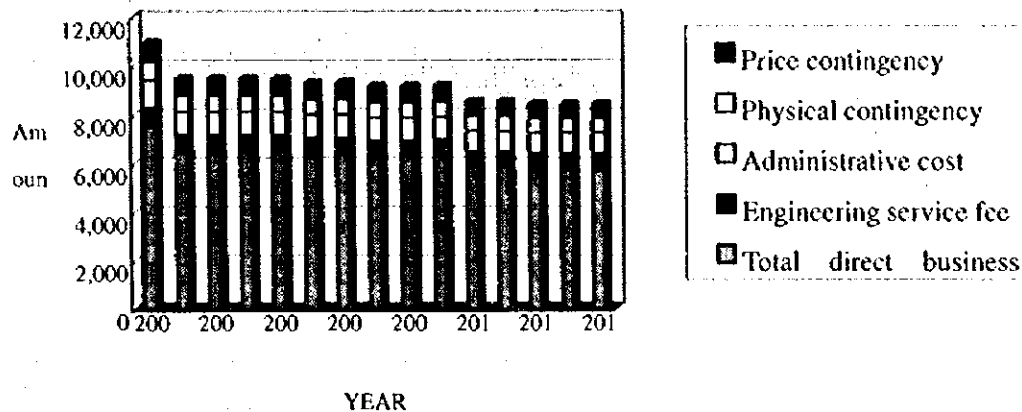
Area/Name of the Plan	First term					Middle term					Last term				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
(6) Improvement of livestock product distribution Fresh milk collecting shipping facilities Dry cheese production facilities Yogurt production facilities															
3) Community forest (1) Seedling growing Restoration of central nursery Mini-nursery Community forest															
2. Improvement plan for agriculture, stock raising and sylviculture support system (1) Agriculture, stock raising and sylviculture support (organizational/technical support, etc.) Improvement of the support team Operation of the support team Improvement of the support center Management of the support center (2) Agriculture, stock raising and sylviculture support Cereal bank, Mill Small-scale credit scheme Agricultural management credit scheme Equipment and materials bank															
3. Living environment improvement plan (1) Improvement of potable water facilities Small-scale water supply system Modern wells (100m deep) Construction of new wells (30m deep) Restoration of wells (30m deep) (2) Information diffusion/education facilities (3) Improvement of health/hygiene Simple health hut (4) Improvement of education Classroom Improvement of school farm															
4. Environment protection plan (1) Conservation of soil Soil preservation (plowing) Soil preservation (afforestation)															

11.4 Resources mobilization principles

(1) Development Master Plan

The project cost for the year 2000, the starting year of the Development Basic Plan (Master Plan), amounts to 11,780 million FCFA (21.4 million USD) and is the biggest in terms of annual project cost. That of the other years (14 years) is around 10,338 million FCFA and the smallest cost is 9,302 (See Figure 11.4.1).

Figure 11.4.1 Yearly project cost



The public investment budget of Niger for fiscal year 1998 is estimated at 101.5 billion FCFA, 93.3% of which originates from foreign aids in the form of loan or grant. The amount allocated to departments is unknown. Assuming that the public investment budget is divided by eighth, seven departments and a Niamey urban commune, 12.7 billion FCFA, or 92.7% shall be allocated to a department. Assuming that this amount is allocated to the department of Tillabéri in 2000, additional resources assistance is necessary to implement the master plan even if the beneficiaries shall contribute 16% of the total project cost as estimated (11,800 million FCFA). Thus, following principles are recommended in terms of resources mobilization.

- ① Promotion of the structure adjustment policy
- ② Promotion of the decentralization policy
- ③ Reinforcement of taxes collection system
- ④ To give priority to projects according to the degree of beneficiary's contribution
- ⑤ To request assistance from aid agencies

(2) Priority projects

Table 11.4.1 shows the work load, direct work cost, and work period for each project of the Study area support project. The Agricultural Support System Strengthening Project and the Seedling Production Project are aimed at 40 villages in the study area, but the main crop

ameliorated seed distribution project and the stock improvement project are aimed at all of the villages in the study area.

Table 11.4.1 Content of support projects in the Survey Area

Project name	Unit (000 FCFA)	Project scale		Project cost (million FCFA)	Project duration (years)
(1) Major cereal ameliorated seeds distribution project				737.1	12
Improvement of the seed center	49,985.0	6.0	places	299.9	5
Seed plot accommodation (millet)	10,600.0	40.0	places	424.0	10
Seed plot accommodation (sorghum)	66.0	200.0	ha	13.2	12
(2) Stock improvement project				182.6	7
Livestock improvement center	82,700.0	1.0	places	82.7	1
Introduction of sire bulls	27.7	2,708.0	ha	75.1	5
Introduction of superior cows	21.8	1,137.0	ha	24.8	5
(3) Seedling production project				521.1	15
Restoration of central nursery	325,150.0	1.0	places	325.2	1
Mini-nursery	180.0	525.0	bulls	94.5	15
Community forest	112.5	900.0	cows	101.3	15
Improvement of the seed center	49,985.0	6.0	places	299.9	5
Seed plot accommodation (millet)	10,600.0	40.0	places	424.0	10
Seed plot accommodation (sorghum)	66.0	200.0	ha	13.2	12
(4) Improvement plan for agriculture, stock raising and sylviculture support system				2,648.0	15
Agriculture, stock raising and sylviculture support team facilities	15,000.0	1.0	places	15.0	1
Operation of agriculture, stock raising and sylviculture support team facilities	51,600.0	15.0	year	774.0	15
Improvement of agriculture, stock raising and sylviculture support team facilities	70,500.0	6.0	places	423.0	1
Agriculture, stock raising and sylviculture support center management	57,600.00	6.0	places	345.6	15
Agriculture, stock raising and sylviculture support system				1,090.4	10
Cereal bank, mill	9,160.0	40.0	places	366.4	10
Small-scale credit scheme	600.0	40.0	places	24.0	10
Agricultural management scheme	3,000.0	40.0	places	120.0	10
Equipment and materials bank	14,500.0	40.0	places	580.0	10
Total (direct business cost)				4,088.8	

Table 11.4.2 shows the direct cost and work load of the 3 villages of the model pilot project. The work execution period is 5 years for all 3 villages. Comparing work costs by village, Dyabou was 862 million FCFA which is 3 to 4 times as much as the other villages. The reason for this was road construction leading to the village and accompanying field irrigation construction was higher than the other villages.

Table 11.4.2 Content of Model Pilot Projects

Type of construction	Unit	Dyabou		Kourégou		Tidani		Total	
		Quantity	Cost million FCFA	Quantity	Cost million FCFA	Quantity	Cost million FCFA	Quantity	Cost million FCFA
(1) Conservation of Agricultural Land									
Stone ridges	ha	465.0	9.5	380.0	7.8	180.0	3.7	1,025.0	21.0
Contour planting of Andropogon	ha	0.0	0.0	285.0	0.0	0.0	0.0	285.0	0.0
Zai	ha	585.0	0.0	480.0	0.0	225.0	0.0	1,285.0	0.0
Simple eyebrow ridges	ha	350.0	0.0	0.0	0.0	270.0	0.0	620.0	0.0
(2) Improvement of Agricultural Roads									
Agricultural roads	km	2.0	14.0	0.0	0.0	0.0	0.0	2.0	14.0
Koris crossing work	Site	3.0	21.0	3.0	21.0	1.0	7.0	7.0	49.0
(3) Improvement of Small Irrigation Facilities									
Field development	ha	11.0	187.0	1.0	17.0	0.2	3.4	12.2	207.4
Construction of small scale dams	Site	1.0	550.0	0.0	0.0	0.0	0.0	1.0	550.0
Pond restoration	Site	0.0	0.0	1.0	18.0	0.0	0.0	1.0	18.0
(4) Improvement of Distribution of Agricultural Products									
Collecting and shipping facilities	Site	1.0	20.3	0.0	0.0	0.0	0.0	1.0	20.3
(5) Improvement of Land Commissions									
Cadaster elaboration	Site	0.1	5.0	1.0	50.0	1.0	50.0	2.1	105.0
(6) Improvement of Fodder Production Infrastructure									
Grassland development	ha	0.0	0.0	0.0	0.0	100.0	30.0	100.0	30.0
Livestock nutritional brick production facilities	Site	19.0	0.4	17.0	0.3	15.0	0.3	51.0	1.0
(7) Improvement of Water Supply Facilities for Livestock									
Rehabilitation of deep wells	Site	0.0	0.0	0.0	0.0	1.0	4.0	1.0	4.0
Construction of new wells	Site	0.0	0.0	1.0	9.0	0.0	0.0	1.0	9.0
(8) Improvement of Livestock Product Distribution									
Fresh milk collecting and shipping facilities	Site	1.0	16.0	0.0	0.0	0.0	0.0	1.0	16.0
Dry cheese production facilities	Site	3.0	1.4	4.0	1.9	4.0	1.9	11.0	5.2
Yogurt production facilities	Site	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(9) Improvement of Potable Water Supply Facilities									
Modern wells	Site	1.0	10.0	8.0	106.4	5.0	66.5	14.0	182.9
Construction of new wells	Site	1.0	1.0	1.0	1.0	0.0	0.0	2.0	2.0
Restoration of wells	Site	0.0	0.0	0.0	0.0	1.0	4.0	1.0	4.0
(10) Diffusion of Information and Education Facilities									
Solar powered TV	Site	1.0	0.7	1.0	0.7	1.0	0.7	3.0	2.1
(11) Improvement of Health and Hygiene									
Simple health huts	Site	1.0	5.6	1.0	5.6	1.0	5.6	3.0	16.8
(12) Improvement of Education									
Classrooms	Site	1.0	8.5	2.0	17.0	1.0	8.5	4.0	34.0
School farms	Site	1.0	7.2	1.0	7.2	1.0	7.2	3.0	21.6
(13) Soil Conservation									
Flowing	ha	300.0	3.9	0.0	0.0	320.0	4.1	620.0	8.0
Afforestation	ha	25.0	0.5	25.0	0.5	25.0	0.5	75.0	1.5
Total			862.0		263.4		197.4		1,322.8

* 1) In principle, conservation of agricultural land is practiced as a part of farming practice. Thus, the cost of stone ridges is limited to the transport of the stones.

Chapter 12 Suggestions and Recommendations

The aim of the Master Plan is to contribute to the prevention of desertification through both sustainable development of agriculture, stock raising and silviculture and continuous improvement of living conditions in the Study Area. If this aim can be achieved through the implementation of the Master Plan, it could then serve as a model case for combating desertification not only in the Study Area but for the whole of the Republic of Niger as well as even other countries in the Sahel region. Many problems still remain to be solved, however, in order to carry out this Plan.

It is suggested that particular attention should be given to the items outlined below in implementing the Master Plan.

(1) Preparations for carrying out project tasks

The Government of Niger should work out a national investment plan which incorporates the Master Plan for development. In this case, the Government will need to press ahead positively with the policies for realizing both structural adjustment and decentralization of power. In addition, CNEDD should disclose information regarding the national investment plan to various donor countries and coordinate their plans so that the various plans of each country do not overlap. The Government of Niger is strongly encouraged to take the steps necessary to realize the implementation of the Master Plan as soon as possible in a steady fashion so as to contribute to efforts to combat desertification.

With respect to the Project of Support to the Study Area and the Model Pilot Project, in particular, the Government of Niger should consult with the secretariats of the CCD, IFAD, and similar organizations regarding the aforementioned national investment plan and also seek technical assistance as well as raise necessary funds at its earliest convenience.

(2) Reconfirmation of needs and detailed planning

The Master Plan maps out the basic direction for combating desertification in the Study Area. Prior to implementing the Master Plan, it is necessary to reconfirm actual needs and to carry out detailed studies and plans for the purpose of confirming the viability and validity of the work to be done under the Plan. In this case, it is necessary to verify the consistency with the preparatory work described in the preceding section. Mention also needs to be made here that with respect to the issue of artificial insemination contained in the livestock improvement project, the Government of Niger should review its implementation with an eye to the awareness of farmers, since farmers have yet to develop a sufficient awareness of how productivity can be increased through the improvement of livestock.

(3) Decreasing the rate of population growth

Even if the use of improved seeds was widely realized and the measures for conserving farmland were carried out as set forth in the Master Plan, it is likely that the current food self-sufficiency rate of 88.2% (in the year 1996) would fall to as low as 61.2% by the target year (2014) if the annual rate of population growth remained as high as 3.3%. What this means is that so long as the rate of population growth remains as high as it is, the rate of self-sufficiency in food will not improve at all. The same would also hold true for other areas such as elementary education, health and hygiene. The Government of Niger should thus positively address the problem of reducing the rate of population growth not only through the introduction of family planning, but also by raising the literacy rate as well as improving health and sanitation. Such a combined approach will also serve to heighten the effectiveness of the Master Plan.

(4) Budget allocations to Land Commissions and granting of incentives for land registration

Population growth contributes to a further acceleration in the expansion of desertification. This in turn leads to an increasing number of land disputes among villagers. Thus, in order to promote effective use of the land, it is of fundamental importance that land ownership and leaseholds be clarified.

The Government should establish Land Commissions as set forth in the Rural Code and give preference to allocating sufficient budget resources for their proper administration. The Government should also grant incentives such as preferential implementation of projects on a priority basis for those villages having a high rate of preparation of rural cadasters.

(5) Dissemination and cultivation of Terroir management methods

Since the Terroir method of management makes it possible to enhance the ability of local inhabitants to govern themselves (empowerment), its introduction is extremely important in securing the quality and continuity of project activities. The GON should guide and instruct villagers on how to set up Terroir Management Committees, and how to control, manage and evaluate them. Moreover, in this regard, the government should also provide guidance to relevant institutions and organizations.

(6) Raising the status of women in society and introducing concrete guidelines

Women fill major roles in such areas as farm labor, household work and the rearing of children. The Government should recognize the important roles played by women and at each stage of planning, implementation, maintenance, and administration of projects, give careful consideration to those measures which will raise the social status of women. As one example, although land ownership by men is currently dominant, the Government should set

concrete guidelines (in terms of percent) regarding land ownership by women and publicize the extent to which such ownership is achieved, once project work has been implemented.

(7) Sustainable supply of firewood

Supply of firewood to the city of Niamey is done on a pilot basis by autonomous management by the residents in two districts of Kollo and Say, based on the law on firewood markets. This project should be quickly extended to the other four districts so that sustainable cutting of firewood would be maintained. Also, a central tree nursery should be developed in each district, where model forestation should be demonstrated to educate the residents.

(8) Stepwise improvement of distribution through markets

The current market distribution system is weak. It is necessary to promote organization of farmers, to develop a system for market information management and registration of market brokers and to improve the legal system related to the market law. Effective distribution through markets should be further developed, together with creation of production sites, through improvement of collective dispatching and processing facilities, standardization of agricultural and livestock products, grasping of trends in the export markets, and the like.

(9) Introduction of small-scale credit scheme

Demand for funds for purchase of equipment and materials for agricultural exploitation comes more often from women. TAIMAKO Saving and Credit Corporation has experience in this kind of finance and the small-scale credit schemes of France cover cereal banks, livestock breeding, handicraft manufacturing, in addition to purchase of equipment and materials. The rate of repayment of the credit allowed in the past is 98 to 100%. This type of credit scheme is essential for modernization of agriculture and agricultural villages and effective lending may be promoted by a Terroir Management Committee acting as the window for application and providing joint guarantee. The government of Niger should procure low interest and long-term funds urgently for the purpose.

(10) Development and securing of human resources

The local inhabitants of the Study Area where a project is implemented can expect the following things in terms of improvement of social and economic conditions including: 1) an increase in the degree of self-sufficiency of food for farmers, 2) improvement in levels of education, 3) improvement of health and hygiene conditions, 4) alleviation of poverty, amongst others. The consistent involvement of good leaders and other persons concerned is essential in order to realize the improvement of these conditions, as well as the effective and suitable implementation of the suggestions 1 through 9 above. It is imperative that the Government of Niger give priority at each national, departmental, district, sub-district, and

village level to developing and securing necessary human resources for achieving “sustainable development and improvement of living conditions”.

Appendix

1. List of Steering Committee Members

1	Directeur des études, de la Programmation et de L'Intégration Régionale, MII/E
2	Chef de Service Etudes, DEPIR/MII/E
3	Directeur du Génie Rural, MII/E
4	Directeur de l'Environnement, MII/E
5	Directeur de l'Agriculture, MAg/EI
6	Directeur de l'Elevage, MAg/EI
7	Directeur des Ressources en Eau, MII/E
8	Représentant du Ministère du Plan
9	Représentant du Ministère du Développement Social, de la Population, de la Promotion de la Femme et de la Protection de l'Enfant
10	Représentant du Secrétariat Exécutif du CNEDD
11	Equipe du l'étude sur place envoyée par JICA

2. *List of Study Team Members*

Nom	Domaine
Nobuyoshi Sakamoto	General
Masahiro Yagi	Rural society/environment
Keizo Maruyama	Agriculture
Yasuo Kamiya	Livestock
Shintoku Yonamine	Agricultural support/farmers' organization
Katsutoshi Ohki	Agricultural and rural infrastructure
Ryuichi Sakuta	Soil conservation
Jotaro Yasuhisa	Community forest
Hiroshi Sasamori	Land use/remote sensing
Kimio Osuga	Project evaluation/design and cost estimate
Koichiro Niinomi	Work coordination

3. *List of Counterparts in Niger*

Nom	Homologues Japonaise	Spécialités	Structures
Wata Issoufou Yaya Madougou Bojkari Issaka	Nobuyoshi Sakamoto	Ingénieur des Eaux/forêts Agro-Economiste Ingénieur de Génie Rural	DE/PIR/MI/E CNEDD/MP DGR/MI/E
Mahanane Boubakar Issaka Hachimou	Masahiro Yagi	Sociologue/Economiste Ingénieur des Eaux/Forêts	DE/PIR/MI/E DE/MI/E
Abdoul Aziz Oumar	Keizo Maruyama	Ingénieur Agronome	DA/MAg/EI
Madagi Bagoudou	Yasuo Kamiya	Pastoraliste	DEI/MAg/EI
Mme Tagaza Safi Moutari Mahamane	Shintoku Yonamine	Chef de Bureau d'Administration Ingénieur Agronome	DPF/MDS/P/PE/PE DA/MAg/EI
Amadou Dan Jimo	Katsutoshi Ohki	Ingénieur de Génie Rural	DGR/MI/E
Moussa Inja	Ryuichi Sakuta	Ingénieur des Travaux Ruraux	DGR/MI/E
Abdou Maicharou	Jotaro Yasuhisa	Ingénieur des Eaux/Forêts	DE/MI/E
Hamani Saley	Hiroshi Sasamori	Ingénieur E/F/Télétection	DE/MI/E
Sadikou Moutari	Kimio Osuga	Spécialiste en évaluation des projets	MP

4. *The Scope of Work*

THE SCOPE OF WORK
FOR
THE STUDY FOR THE PLAN TO COMBAT
DESERTIFICATION
IN TILLABERY DEPARTMENT
IN
THE REPUBLIC OF NIGER

AGREED UPON
BETWEEN
MINISTRY OF HYDRAULIC AND
ENVIRONMENT
AND
JAPAN INTERNATIONAL COOPERATION
AGENCY

NIAMEY, 11 JULY 1997



Mr. Najada IBRAHIM
Secretary General
Ministry of hydraulic
and Environment
Republic of Niger

鶴丸雄二郎
Mr. Yujiro TSURUMARU
Leader,
Preparatory Study Team,
Japan International
Cooperation Agency

I. INTRODUCTION

In response to the request of the Government of the Republic of Niger (hereinafter referred to as "GON"), the Government of Japan (hereinafter referred to as "GOJ") has decided to conduct the Study for Plan to Combat Desertification in Tillabery Department (hereinafter referred to as "the Study") in accordance with the relevant laws and regulations in force in Japan.

Japan International Cooperation Agency (hereinafter referred to as "JICA"), the official agency responsible for the implementation of the technical cooperation programs of the GOJ, shall undertake the Study in close cooperation with authorities concerned of GON.

The present document sets forth the Scope of Work for the Study.

II. OBJECTIVES OF THE STUDY

The objectives of the Study are;

1. to formulate Master Plan to Combat Desertification in Tillabery Department through the sustainable agriculture (including pasture) and rural development,
2. to select priority project(s) for the detailed Study,
3. to conduct the detailed Study for priority project(s) and
4. to carry out technology transfer to the counterpart personnel of GON through on-the-job training in the course of the Study.

III. STUDY AREA

The Study shall cover the areas of Tillabery Department (See Annex I).

IV. SCOPE OF THE STUDY

In order to achieve the objectives mentioned above, the Study shall cover the following:

Phase I : Formulation of Master Plan

1. Collect and review relevant existing data and information in Niger and the Study area. These include;
 - a. national economy and social features,
 - b. national development plan and development plan for the Study area, including National Plan of Action to Combat Desertification,
 - c. agricultural sector policy,
 - d. existing and planned relevant development project(s),
 - e. organizational structure and responsibilities of relevant institutions, and budgetary performance of those relevant institutions,
 - f. data on agriculture-related physical environment including climate, topography, land use, rainfall, soil, and hydrological conditions,
 - g. data on desertification, vegetation.

2. Carry out field survey. These include;
 - a. natural condition,
 - location, area and topography,
 - meteorology
 - hydrology and water use,
 - geology,
 - soils,
 - desertification, and vegetation,
 - b. socio-economic condition
 - economic indices,
 - demographic conditions,
 - physical settings and resources,
 - socio-economic and institutional settings and structure (vertical, horizontal and gender-wise), and resources ,
 - development needs
 - present condition and readiness of farmers for participation in the development processes,
 - land tenure,
 - water rights,

- c. agricultural condition including,
 - present land use,
 - farming practices,
 - pastoral practices,
 - agricultural economy,
 - postharvest,
 - gender related issue,
 - d. agricultural support,
 - research activities,
 - extension,
 - farmer's organization,
 - credit facilities (including public, private and NGO's),
 - e. rural infrastructure,
 - f. environmental conditions.
3. Analyze collected data and information and identify major constraints and development potential.
4. Prepare a Master Plan;
- a. land use plan,
 - b. water use plan for sustainable agriculture,
 - improvement plan for surface water use,
 - improvement plan for ground water use,
 - development plan for Operation & Maintenance organization for irrigation and water supply facilities, and
 - others,
 - c. development plan for agriculture,
 - development plan of farming and pastoral practice,
 - development plan of diversified crop,
 - improvement plan for agricultural support system, e.g. extension services, adaptive research, and credit
 - development plan for farmer organization,
 - improvement plan for processing and marketing, and
 - others,
 - d. land and water conservation plan,
 - e. rural development plan,
 - improvement plan for water supply,
 - development plan for road network,
 - development plan for rural energy, and
 - others.
5. Identify development projects and to evaluate their

expected results.

6. Select priority development project(s) for Phase II.

Phase II : Execution of Detailed Study for priority development project(s).

1. Collect detailed data and information through field surveys.
2. Formulate the optimum plan for the priority development project(s) through participatory approach including a series of workshops with counterparts, relevant organizations and participating farmers.
3. Evaluate the expected results in terms of technical soundness, financial viability, economic profitability, social changes, and environmental effects.

V. STUDY SCHEDULE

The tentative schedule of the Study is shown in the attached ANNEX II.

VI. REPORTS

JICA shall prepare and submit the following reports to the GON. In case any doubt arises in interpretation, the English text shall prevail.

1. Inception Report

Twenty (20) copies of French report and Five (5) copies of English report at the commencement of the Phase I field study.

2. Progress Report (1)

Twenty (20) copies of French report at the end of the Phase I field study.

3. Interim Report

Twenty (20) copies of French report and Five (5) copies of English report at the commencement of the Phase II field study.

4. Progress Report (2)

Twenty (20) copies of French report at the end of the Phase II field study.

5. Draft Final Report

Twenty (20) copies of French report and Five (5) copies of English report after Phase II work in Japan. GON shall submit their comments to Bureau du JOCV/JICA within one (1) month after receipt of the Draft Final Report.

6. Final Report

Fifty (50) copies of French report and Ten (10) copies of English report within two (2) months after receipt of GON's comments on the Draft Final Report.



VII. UNDERTAKING OF GON

1. To facilitate the smooth conduct of the Study, GON shall take following necessary measures:
 - a. to secure the safety of the Japanese study team (hereinafter referred to as "the Team"),
 - b. to permit the members of the Team to enter, leave and sojourn in Niger for the duration of their assignment therein, and exempt them from foreign registration requirements and consular fees,
 - c. to exempt the members of the Team from taxes, duties, and other charges on equipment, machinery and other materials brought into and out of Niger for the conduct of the Study,
 - d. to exempt the members of the Team from income tax and charges of any kind imposed on or in connection with any emoluments or allowances paid to the members of the Team for their services in connection with the implementation of the Study,
 - e. to provide necessary facilities to the Team for remittance as well as utilization of the funds introduced into Niger

- from Japan in connection with the implementation of the Study,
- f. to secure permission for entry into private properties or restricted areas for the conduct of the Study,
 - g. to secure permission for the Team to take all data and documents (including photographs and maps) related to the Study out of Niger to Japan, and
 - h. to provide medical services as needed. Its expenses will be chargeable to the members of the Team.
2. GON shall bear claims, if any arise, against the members of the Team resulting from, occurring in the course of, or otherwise connected with the discharge of their duties in the implementation of the Study, except when such claims arise from gross negligence or willful misconduct on the part of the member of the Team.
 3. Ministry of hydraulic and Environment (hereinafter referred to as "MHE") shall act as counterpart agency to the Team and also as a coordinating body in relation with other governmental and non-governmental organizations concerned for the smooth implementation of the Study.
 4. MHE shall, at its own expense, provide the Team with the following, in cooperation with other relevant organizations:
 - a. available data and information related to the Study,
 - b. counterpart personnel,
 - c. suitable office space with necessary equipment in Niamey, and
 - d. credentials or identification cards.

VIII. UNDERTAKING OF GOJ

For the implementation of the Study, JICA shall take the following measures:

1. to dispatch, at its own expense, the Team to Niger, and
 2. to pursue technology transfer to Niger counterpart
- 
- 

personnel in the course of the Study.

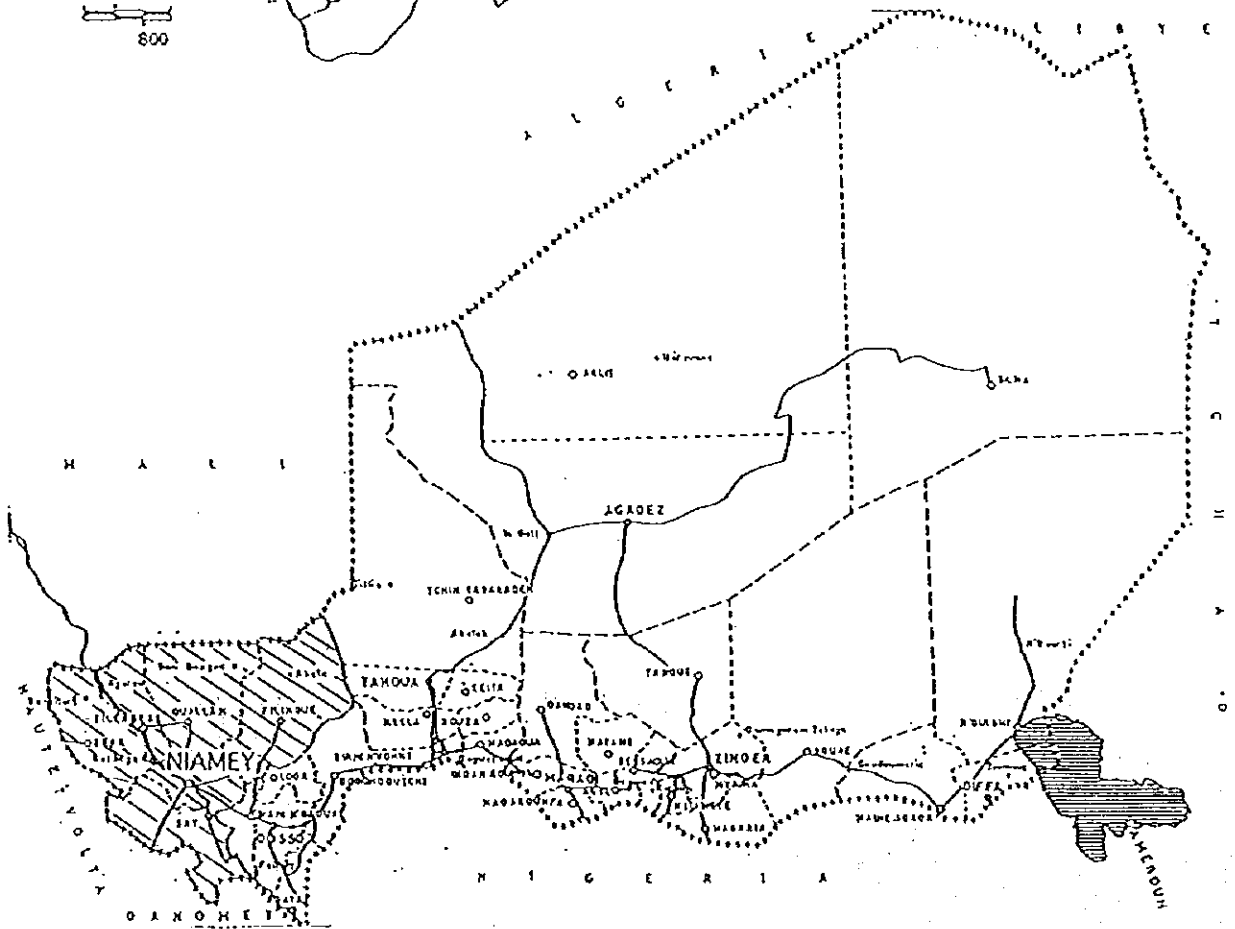
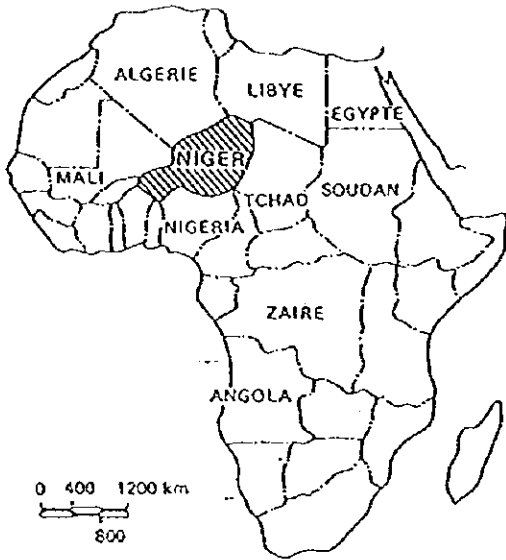
IX. CONSULTATION

JICA and the MHE shall consult with each other in respect of any matter that may arise from or in connection with the Study.

X. TRANSLATION

The Scope of Work is prepared on both French and English. In case any doubt arises in interpretation, the English text shall prevail.

Annex I



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TENTATIVE SCHEDULE

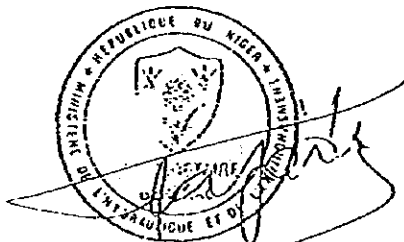
Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Item																					
Works in Niger															◎						
Works in Japan																					
Phase	← Phase I →								← Phase II →												
Report	▲ Ic/R			▲ P/R (1)						▲ It/R		▲ P/R (2)		▲ Df/R				▲ F/R			

- Ic/R : Inception Report
- P/R(1) : Progress Report (1)
- It/R : Interim Report
- P/R(2) : Progress Report (2)
- Df/R : Draft Final Report
- ◎ : Comments on Df/R by Niger side
- F/R : Final Report

5. *The Minutes of Meeting on the Scope of Work*

THE MINUTES OF MEETING
ON
THE SCOPE OF THE WORK
FOR
THE STUDY FOR THE PLAN TO COMBAT
DESERTIFICATION
IN TILLABERY DEPARTMENT
IN
THE REPUBLIC OF NIGER
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鶴丸雄二郎
Mr. Yujiro TSURUMARU
Leader,
Preparatory Study Team,
Japan International
Cooperation Agency

In response to the request of the Government of the Republic of Niger (hereinafter referred to as "the GON"), the Government of Japan (hereinafter referred to as "the GOJ") decided to dispatch through Japan International Cooperation Agency (hereinafter referred to as "JICA", which is responsible for the implementation of technical cooperation programs of the GOJ, the preparatory study team (hereinafter referred to as "the Team"), headed by Mr. Yujiro Tsurumaru, to the Republic of Niger from 4th to 19th July so as to discuss and to exchange views on the Study for the Plan to Combat Desertification in Tillabery Department in the Republic of Niger (hereinafter referred to as "the Study") with the Ministry of Hydraulic and Environment (hereinafter referred to as "the MHE") and other government officials concerned with the implementation of the Study.

The MHE and the Team mutually agreed to the Scope of the Work of the Study.

The following minutes were prepared to confirm the main issues discussed and the matters agreed upon by both sides in connection.

1. Both sides understood that the Plan should be formulated and implemented with participation of local population.
2. Both sides agreed that the Plan would include prevention of further desertification and restoration of the degraded land in existing agricultural and pastoral areas in the Tillabery Department which exclude Niamey Urban Community.
3. For the smooth implementation of the Study, both sides agreed upon the need for a formulation of the Steering Committee, consisting of representatives of the concerned ministries and organizations. Permanent members of the Committee would be the MHE, the Ministry of Plan and Privatization, the Ministry of Agriculture and Pasture and the Ministry of Social Development, Population, Promotion of Woman and Protection of Child as well as the Japanese team to be dispatched for the Study (hereinafter referred to as "the Study Team").
4. The MHE will coordinate issues related to the counterpart personnel from the concerned ministries.
5. Both sides agreed that the Study Team would conduct the

Initial Environment Examination (IEE) on the priority projects identified through the Master Plan. The Study Team would further conduct the Environmental Impact Assessment (EIA), when found necessary as a result of the IEE, in accordance with the laws and regulations of the GON and the guidelines of JICA.

6. The GON expressed its difficulty in providing the necessary vehicle(s) to the Study Team and requested its arrangement by JICA. The Team promised to convey the request to the GOJ.

7. The MHE requested a training of the the counterpart personnel in Japan in areas related to the Study to promote an effective technology transfer. The Team promised to convey the request to the GOJ.

8. The GON agreed that all the reports produced by the Study would not be confidential.

9. As for VII-1-f of the Scope of the Work regarding permissions for entry into private properties or restricted areas, the laws and regulations in force in the Republic of Niger will be respected.

10. Provisional duration of the Study would be approximately seventeen months.

Annex

LIST OF PARTICIPANTS

Niger Side

The Ministry of Hydraulic and Environment

Mr. Najada Ibrahim	Sécretaire Général
Mr. Moussa Seini	Sécretaire Général Adjoint
Mr. Wata Issoufou	Directeur des Etudes, des Programmes et de l'Intégration Régionale
Mr. Laouan Saley	Service Equipements Ruraux, Directon du Génie Rural
Mr. Zabeirou Toudjani	Service de la Sylviculture et de la Restauration des Terres/DE
Mr. Souley Aboubacar	Directeur Adjoint de l'Environnement
Mr. Rouscoua Boubacar	Direction des Etudes, des Programmes et de l'Intégration Régionale

The Team

Preparatory Study Team

Mr. Yujiro Tsurumaru	Leader
Mr. Takakazu Wada	Member
Mr. Takanobu Nishimura	Member
Mr. Kozo Ito	Member
Mr. Yasuhei Ajiro	Member
Ms. Yasuyo Hirouchi	Member
Mr. Masao Matsubara	Member

JICA