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AGENCE DU BARRAGE DE KANDADJI



PROGRAMME KANDADJI DE REGENERATION DES ECOSYSTEMES ET DE MISE EN VALEUR DE LA
VALLEE DU NIGER
(P_KRESMIN)



Resettlement Action Plan (RAP 2A) of displacement of Kandadji Dam



Exécutive Summary

Mai 2019

SUMMARY¹

Project Description

The "Kandadji" Program for the Regeneration of Ecosystems and Development of the Niger Valley (P-KRESMIN) aims at the construction of a dam and its ancillary works, development and support for the implementation of an irrigated area of 45,000 ha along the Niger River, and the construction of a hydropower plant with 130 MW of installed capacity. The overall objective of the Program is to help reduce poverty through the natural regeneration of river ecosystems, the improvement of food security and meeting the needs for electricity.



The dam project site is located in Kandadji in the Tillabéri region, 187 km upstream from Niamey and 61 km from the border with Mali. The project includes, among other things, a 24m high mixed concrete and embankment dam including, in the first phase (2A), spillways designed to permit temporary operation of the reservoir at 224m NGN. At this elevation, the left bank dike will be 6,2 km long. The dam will create a reservoir with an area of 143 km² located entirely on the Nigerien territory.

Impact Analysis

The main impact is the resettlement of 5,555 households (32,991 people) resulting from the creation of the reservoir at 224m (phase A). The phasing of the impoundment of the reservoir allows a reduction of 33% of the number of people displaced in the first phase and avoids the total or partial displacement of 9 villages or tribes. An option to reduce resettlement was considered with the study of the development of a protective dike in Ayorou. However, this option proved to be unworkable.

Purpose of the Resettlement Action Plan

The main purpose of the resettlement action plan is to ensure that people who must leave their current environment, lose some of their properties or access to livelihoods following the completion of the dam project are treated fairly and have their share of the program benefits. In this particular case, the resettlement takes into account the phasing of the project, insofar as the final exploitation of the reservoir will be at 228m (phase B).

Legal Framework

The declaration of public utility (DUP in French) specific to the project was the subject of decree n° 2009-225 / PRN / MU / H of August 12, 2009 declaring public utility of the "Kandadji" Program for the Regeneration of Ecosystems and Development of the Niger Valley. This DUP is still in effect and will be completed by a transfer order once the Enquiry Commissioner has validated the data collected during the census and the farmland inventory.

¹ La version française du résumé constitue la version officielle / The French version is the official version.

Most of the main principles of the international standards are reproduced in the Nigerien texts: (i) identification and categorization of the affected people, in particular with reference to their rights and their vulnerabilities; (ii) precise evaluation of the impacts on each affected person; (iii) information, consultation, participation in the resettlement process, and validation of measures by affected people; (iv) comprehensive compensation and livelihood restoration; (v) monitoring and evaluation of the performance of the implemented measures; (vi) existence of legal appeals.

However, in the national regulations, some terms seem to have taken on a slightly different meaning over time, and some tools do not legally exist (complaint management procedures, establishment of organizational responsibilities, etc.).

Consequently, in the context of an operation involving many international stakeholders, it is the most advantageous standards for the affected people that must apply, regardless of the source of these standards, so that all requirements of the donors and the Government of Niger can be respected or exceeded.

Institutional Framework

The Kandadji Dam Agency (ABK) is responsible for the overall implementation of all Kandadji program activities. The ABK is a public industrial and commercial establishment created in 2016 and is placed under the technical supervision of the Minister, Director of Cabinet of the President of the Republic of Niger and under the financial supervision of the Minister of Finance.

The administrative division resulting from the laws on decentralization establishes three levels of decision-making in the institutional system, namely the region, the department and the commune (or municipality). Each of these administrative entities was transferred responsibilities that are exercised by a body that is set up in accordance with legislative and regulatory provisions.

The central role in land management is provided by the land commissions.

Methodology of Socioeconomic Studies

The population census and inventory of assets, including the georeferencing of villages, households and their assets, were completed in January 2017. The inventory of farmland was carried out and completed in November 2017.

Socioeconomic Studies

✓ Census

The census identified 5,555 households to be displaced corresponding to 32,991 people in 17 villages in the Tillabéri Region. The city of Ayorou includes a third of the people to be resettled.

The villages impacted by the first resettlement phase are located in the Tillabéri Region, and more specifically in the following communes:

- Commune of Ayorou: Ayorou, Ayorou Goungou, Ayorou Goungou Koré, Daya Sédentaire, Doulsou, Firgoune, Garey, Loga Beibatane, DayaPeulh;
- Commune of Dessa: Farey, Kandadji, Sanguilé, Seno and neighborhoods of Issilé;
- Commune of Gorouol: Abouja, Bongouro and Tonditchiam.

As the census covered all the households affected by the second resettlement wave, the following socioeconomic description takes into account the 8,088 households affected in Niger by the Kandadji dam project.

✓ Sociodemographic Characteristics of Households

Households are made up of an average of 6.1 people, with a young population because 55% are under 17 years of age. 14% of households are headed by women.

95% of the heads of households stated that they are of Nigerien nationality. The predominant ethnic groups are Songhai-Zarma (67%), Touareg (19%) and Hausa (9%).

6,957 people were identified as vulnerable (disabled, elderly, female heads of households, without family linkages, without land properties).

✓ Main Economic Activities

Agricultural activities consist mostly of subsistence seasonal agriculture, mainly based on riverside rice and off-season crops (cowpea and cassava) along the tributaries. Plots are usually small (5 ha on average). The use of fertilizers is rare and the agricultural practices are often manual.

Livestock contributes to food security through products such as meat, milk and eggs. Livestock is mainly a constituent element of the capital and savings of the populations.

Fishing is practiced in the Niger River and its tributaries in a traditional way, generally during periods of low water. Fishing produce is sold on site, in Tillaberi and Niamey or is processed by smoking and drying.

The commercial activity is mainly concentrated in Ayorou because of the proximity of the national road, and also due to the presence of the cattle market. The Ayorou market draws most of the area's trade with the islands.

Economic diversification is the norm: 76% of household heads perform 2 or 3 economic activities at the same time.

✓ Education and Health

The literacy rate in French is 65% among the population over 15 years old. The net school enrollment rate is slightly lower (44,5%) than the national average. 35% of people in the area have never been to school.

Lack of medical staff is a major problem with only one doctor for all the people to be displaced by the project. Malaria is the main reported pathology in the health centers of the Tillaberi Region and 50% of the reported cases are children under 5 years of age. It is also the main cause of death.

✓ Habitat and Sanitation

94% of residential buildings are built with mud bricks. 61% of households use latrines. 70% of the population consumes water from the river for drinking purposes. Access to drinking water in the area is below the national average.

Eligibility

The basic eligibility unit for resettlement measures is the household as a whole, represented by the head of the household. However, some compensation or indemnity measures will target individual members of affected households.

The census identified 5,555 eligible households that will be physically displaced during the first phase (Phase 2A), representing 32,991 individuals living in 17 villages. Out of these households, there are 1,093 tenant households and 586 building owners were identified as non-residents of the impacted area.

According to the work completed to clarify agricultural land property, 8,523 landowners of agricultural land are eligible for resettlement. Out of these owners, 54% are also crop producers and 90% will be physically displaced (loss of housing) during this first phase.

The date of January 7th, 2017 is considered the cut-off date for determining the eligibility of those who have been surveyed and will be physically and economically displaced by the impoundment of the reservoir. For those identified during the farmland inventory in the reservoir area, the cut-off date is November 4th, 2017, which is the end date for the farmland inventory. Data collected during the 2016-2017 census will need to be updated if more than 4 years elapse between January 7th, 2017 and the beginning of the payment of the indemnities or compensations due to the people affected during the first phase.

Identification of Losses

The main losses of property in the 16 villages and the city of Ayorou include:

- 10,801 private residential buildings, built on 3,266 residential plots;
- 36,032 structures adjoining dwellings or investments on farmland;
- 43 educational facilities, including 1 college and 21 primary schools;
- 7 basic health centers;
- 1 water supply system, 12 boreholes, 12 wells;
- Added to this are administrative or community buildings, agricultural infrastructure, markets, bus stations, places of worship, heritage properties, etc.

Regarding agricultural losses, 8,914 hectares, representing 13,497 agricultural plots of land, will be inundated by the reservoir during phase 2A. In addition to these hectares, 993 ha will be inundated during phase 2B, but they will become inaccessible because of the reservoir. Consequently, a total loss of 9,907 hectares, representing 13,881 plots, is anticipated. There are also 715 hectares which will be lost due to the construction of the first phase resettlement sites and 4,330 hectares required for the creation of the hydro-agricultural schemes offered in compensation.

The losses of annual crops represent 7,019 hectares and those of perennial crops (trees) represent 259,173 trees. To these losses are added about 3,000 hectares of natural resources used by the populations for livestock grazing, gathering firewood, etc.

With regard to income losses, most households rely on diversification of activities to enhance their sources of income. In this context of diversification of income sources, the loss of income is difficult to quantify. Income may differ from year to year with varying sources. However, all active persons may lose income temporarily during the estimated six-month displacement and resettlement period.

Compensation of Losses

The principles that will guide the construction of resettlement sites are as follows:

- Provision to the owner of a fenced dwelling plot on the resettlement site where his/her original village will be relocated, with a plot size greater than or equal to the original plot, but at least of 400 m²;
- Land security of each residential plot through an act of assignment;
- Construction of housing buildings made of improved materials with a minimum area of 40m², with a sanitary facility in each concession;
- Financial compensation for the replacement of structures adjoining dwellings.

In order to improve the infrastructure and services of the project area, the compensations provided while constructing the resettlement sites are as follows:

- Construction of public infrastructure for education and health according to national standards, particularly as regards the population served, including equipment endowment and three-year operating costs;
- Development of a drinking water supply station and distribution system for all resettlement sites;
- Electrification of resettlement sites;
- Reconstruction of community and administrative buildings, with equipment endowment and three-year operating costs in some cases;
- Construction of a literacy center for each site of more than 1,000 inhabitants;
- Establishment of a savings organization in each commune;
- Construction of an equipped sports field on each site;
- Construction of a Friday mosque on each site and one neighborhood mosque by neighborhood;
- Construction of a cemetery for each site;
- Connection of each site to an all-weather road serving the main town of the commune.

Heritage and worship property, which is not a building, will be compensated in kind to allow communities to perform a ceremony or replace the existing site.

The compensation principle for the loss of agricultural land is the replacement of areas lost by farmland that can generate a higher net income than the pre-project situation. The distribution key used is as follows:

- 0.5 ha of irrigated land against 1 ha of rice fields/lowland lost,
 - 0.25 ha of irrigated land against 1 ha of agricultural dune land lost,
- with a minimum area of 0.25 ha irrigated for any lost plot.

Based on this compensation principle, it is expected that 5,400 hectares of irrigation schemes will be developed to compensate for the farmland losses. A complementary agro-sylvo-pastoral study will confirm the total area required. The land provided in compensation will be subject to land tenure security, which could take the form of an emphyteutic lease as it is planned for the first resettlement wave (wave 1). The resettlement sites are located less than 5 km from the proposed hydro-agricultural schemes.

The annual crops will be compensated in the form of an indemnity equivalent to the value of one-year crop production calculated according to the most profitable cultivated crop and the average yield for this production. Perennial crops will be compensated according to the value of the annual production lost until a new plant can produce, multiplied by the value of this production on the markets, plus the cost of 3 replacement seedlings.

Location of Sites and Integration to Host Communities

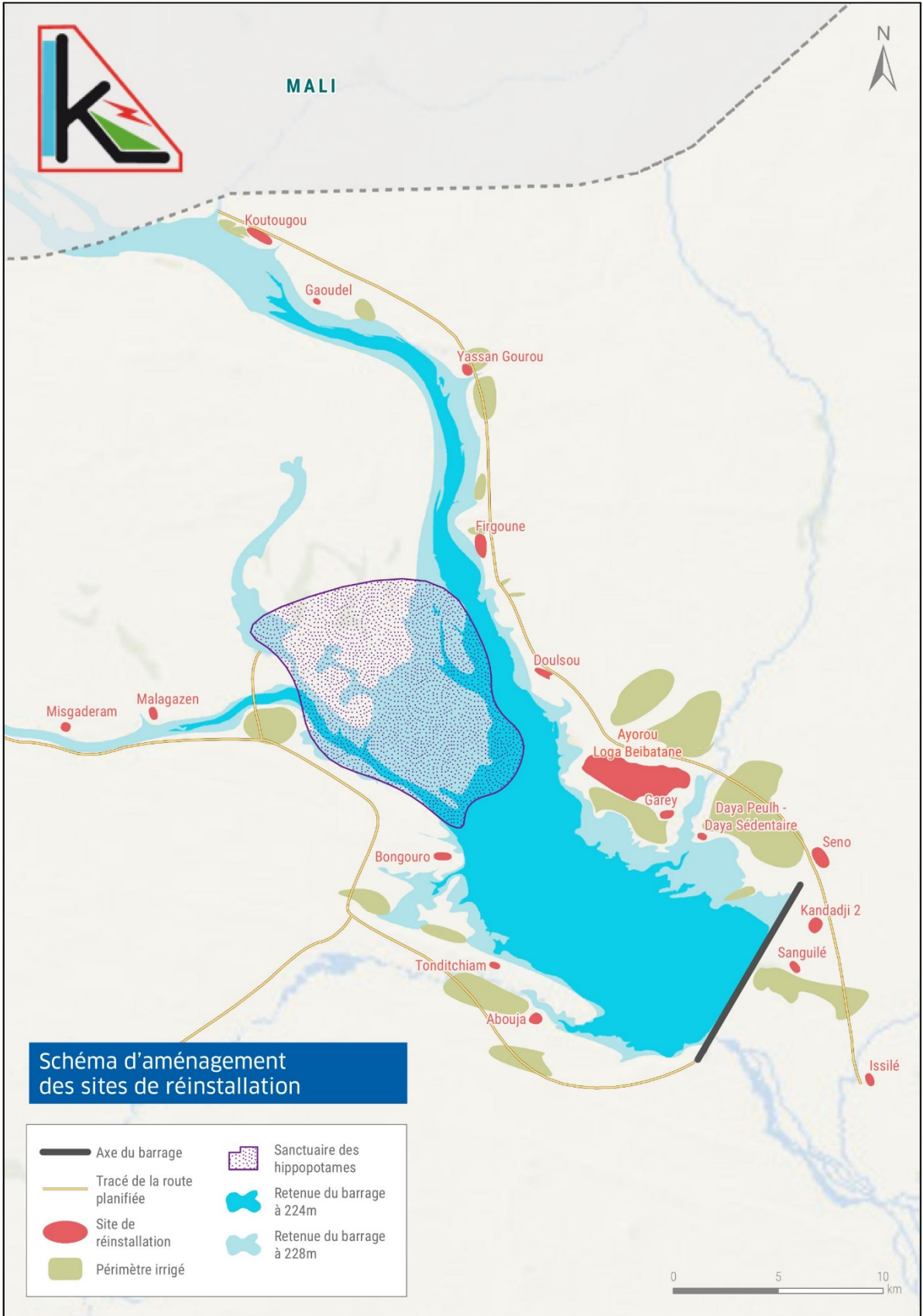
Eleven new sites and an extension of an existing site will be built around the reservoir for the purposes of the first resettlement phase, taking into account the final operating level of the project at 228m and the various planned developments. These sites are located in three communes (municipalities) in the Tillabéri Region: Dessa, Ayorou and Gorouol.

When a displaced village is resettled on the territory of another village, bringing public infrastructure and services up to national standards becomes an essential integration factor to facilitate acceptability and avoid imbalances between the living conditions of displaced people and the host communities. To do so, the measures are as follows:

- Rehabilitation of the public infrastructure and services of the host villages;
- Access to the infrastructure of the resettlement site (health and education);
- Improvement to places of worship;
- Access to the public drinking water and electricity networks;
- Construction of a sanitary facility (latrine and shower) in the concessions of the host villages.

The resettlement sites are all located in their original commune. The traditional links of the displaced and host communities will facilitate the integration of the different communities between themselves.

Location Map of Resettlement Sites around the Reservoir



Preparation of Resettlement Sites

Development of resettlement sites will be based on strengthening existing public infrastructure including rural electrification. The infrastructure will be brought up to national standards, particularly in terms of the number of people served as follows.

Resettlement site	Villages to be resettled	Number	
		households	people
Abouja	Abouja	178	1 078
Ayorou	Ayorou + Ayorou Goungou + Ayorou Goungou Koré + Loga Beibatane	2 870	16 985
Bongouro	Bongouro	175	1 089
Daya Peulh & Daya Sédentaire	Daya Peulh & Daya Sédentaire	112	653
Doulsou	Doulsou	395	2 114
Firgoune	Firgoune	155	950
Garey	Garey	27	198
Kandadji 2	Kandadji	567	3 512
Seno - Farey	Seno + Farey	760	4 302
Tonditchiam	Tonditchiam	112	681
Issilé	Issilé	159	1 079
Sanguilé	Sanguilé	45	350
Total		5 555	32 991

The area required for the resettlement sites is estimated at 715 hectares, of which about 50% will be for the residential areas.

Housing, Infrastructure and Social Services

10,801 residential buildings will be built with improved mud bricks (stabilized mud bricks) with a sanitary facility per fenced plot.

The public infrastructure and services to be foreseen are as follows:

- Construction of a water treatment plant and distribution network in all resettlement sites by standpipes;
- Construction of 11 literacy centers, 22 preschool classes, 103 elementary-school classes and 2 general education colleges meeting national standards, including equipment and operating costs;
- Construction of 6 health centers, including equipment and operating costs;
- Construction of a Friday mosque on each site, i.e. 12 Friday mosques, and 62 neighborhood mosques;
- Construction of a youth center and a sports field on each site;
- Construction of a building for local traditional authorities;
- Reconstruction of administrative or collective buildings;
- Power supply for resettlement sites by a power transmission line on the right and left banks of the River;
- Construction of a cemetery on each site;
- Construction of a waste collection and burning site on each resettlement site.

Resettlement Measures

They include all the measures to be executed, excluding the development of resettlement sites, to compensate for other losses, namely:

- Development of land to compensate for cropland losses including the development of 5,400 net hectares of irrigated schemes and land tenure security;
- Payment of indemnities to replace different goods and revenues lost, not compensated in kind, such as:
 - Indemnity for the loss of annual crops;
 - Indemnity for the loss of trees with an economic potential;
 - Indemnity for the loss of structures adjoining dwellings and investments on farmland;
 - Indemnity for the loss of heritage or sacred property;
 - Indemnity for the loss of revenues.

Livelihood Restoration Program

The Livelihood Restoration Program is designed for the persons affected by the project who will temporarily or permanently lose access to their livelihoods. The Program aims at allowing these economically displaced people to restore and even improve their revenue levels despite their losses. It includes the following measures:

- Agricultural development measures for farmers, including measures for the development of irrigated schemes, training and intensification measures for rainfed crops, development of arboriculture and peri-urban gardening;
- Measures for the development of pastoralism and livestock farming with feed supplementation, training and support measures for genetic improvement, as well as the construction of water points for cattle;
- Measures to encourage forestry development, such as tree nurseries and plantations;
- Fishery development measures, including an allocation of fishing gear, the establishment of boat landing areas, the provision of working capital for obtaining micro-financing, training and support for the improvement of post-harvest operations;
- Measures to develop commercial activities with a capacity-building program, participatory identification, evaluation and development of micro-projects, the allocation of working capital for obtaining micro-financing, support for professional organizations;
- Measures to develop income-generating activities, including micro-project support, training and support for groups, training of literacy trainers.

These measures should help strengthen the economic activities in the overall region of Tillabéri, even if they are intended primarily for the people affected by the project.

Transition Support Program

This Program includes measures to support the transition, either because of the displacement of the population itself, or because of the phasing of the resettlement (phases A and B).

Concerning the displacement of the population from a village to a new resettlement site, the measures to be taken include:

- Allowance for tenants of a residential or non-residential building,
- Support for vulnerable populations through additional material assistance during the displacement and one-off food aid;
- Measures to support displacement, including a lump sum allowance for households, an allowance for the completion of the necessary rites of passage for each village, logistical assistance and security support during the displacement;
- Capacity building on safety through, among other measures, information, awareness and consultation sessions.

Concerning the transition period between the two resettlement phases, the measures to be taken include:

- A capacity-building measure for land property commissions (COFOB in French);
- Development of the river banks at Ayorou during the transition period;
- A measure to develop the banks of the reservoir if the phasing extends beyond two years;
- A management measure for the temporary islands of the reservoir, with the creation of *bourgou* pastures;
- An additional compensation equivalent to two years of crop production for the producers cultivating on the new irrigated schemes, if the real production is less than the expected production the first years.

This Program also includes resources to support the enquiry commissioners, the conciliation and mediation commissions as well as to provide legal assistance when a dispute cannot be resolved through conciliation.

Displacement Process

The displacement process consists in moving households and their property, including animals, to the new resettlement sites. The displacement will take place during the dry season.

The financing agreement between the Government of Niger and the World Bank specifies that the resettlement activities should be completed no later than 6 months before the impoundment of the reservoir. The construction schedule for the resettlement sites and the other constructions planned under the RAP2A takes into account this deadline.

Environmental Management

The scope of the resettlement activities and, where appropriate the upgrading of the host villages, means that the potential environmental impacts are comparable in nature in both cases. The anticipated impacts are noteworthy but have a local and limited scope; they can be mitigated by specific measures and are therefore evaluated, at most, as "average impacts".

Consultation and Participation of People Affected by the Project

At the start of the study, information meetings were organized to explain the process of the study.

The process of communication with the communities continued during the census and inventory of assets ensuring the smooth running of operations. In parallel with the field investigations, discussion groups debated the main issues related to the resettlement and phasing operation: 38 focus groups were organized bringing together a total of about 700 people in January 2017 during the socioeconomic study. Then 71 focus group meetings of 5 to 15 people were held in October 2017 on resettlement phasing.

At the end of the study, twenty public consultations took place from July 24 to August 11, 2018. Despite the communication effort prior to consultations, a low participation was recorded mainly due to the period of agricultural activities, but also because of a certain 'consultation fatigue' after meeting for years without seeing the start of the project.

The main lesson from these consultations is a general acceptance of the project and the principles of compensation, particularly the construction of residential buildings by a contractor. The consultations also highlighted:

- general safety concerns. The RAP has taken them into account in reinforcing this aspect during displacement;
- questions about the deadline for future investments;
- questions about residential buildings, especially building materials that are proposed but not well known by the people in the area.

Due to the low participation of the people affected by the project, a reinforcement of the communication will have to be carried out with the villages affected by the first phase of resettlement at the start of the implementation, in order to make sure that the principles and methods of compensation have been well understood.

Grievance Management Mechanism

Regarding grievance management, the priority is given to negotiation and conciliation, informally first and then through a local conciliation commission. In the event of non-conciliation, the most diligent party may appeal to the appropriate judicial authorities.

Organizational Responsibilities

The Kandadji Dam Agency (ABK in French) is the owner of the resettlement plan on behalf of the Government of the Republic of Niger. As such, it will regularly monitor and control the activities carried out by the Service Provider in charge of implementing the RAP2. It will validate work programs, request for funds and ensure the availability of funding. It will also provide support to the land titling process for affected persons. The owner will coordinate and liaise between the Service Provider team and all public organizations and services, as well as the international donors involved in the implementation of the RAP2.

A service provider will be selected to implement all RAP2A components. He will put in place the necessary means to ensure a satisfactory execution of the RAP2A. He will ensure the planning of the overall RAP2A and the coordination of the various activities between them and with the dam construction work as well as with any other project.

Implementation Schedule

The duration of the implementation of RAP2A is estimated at 6 years.

Construction work may be carried out in groups of 2 or 3 geographically neighboring sites as well as in terms of the overall volume of work to be done.

The planning and the development of irrigated perimeters represent major challenges for the success of the resettlement action plan.

Monitoring and Evaluation

The monitoring and evaluation of the proposed actions in the resettlement action plan should focus on achieving the objectives of the programs, by evaluating them using specific indicators.

The internal monitoring of the implementation of RAP2A will be the responsibility of the ABK. External monitoring and evaluation will be carried out by an independent consultant.

RAP2A Budget

The overall budget of this resettlement action plan is estimated at FCFA 241.6 billion or US\$ 420 million as follows.

Cost estimation	FCFA Millions	US\$ Millions
Preparation and development of 12 resettlement sites and land tenure security	13 870	24.1
Construction of residential buildings, sanitary facilities and plot fences	60 622	105.4
Construction of public education and health infrastructure as well as community and administrative infrastructure, including worship assets	11 022	19.2
Water supply with construction of a treatment station and a distribution network on the left and right banks of the river	19 218	33.4
Rural electrification on the left and right banks of the river	5 886	10.2
Compensation of agricultural land losses with preparation of hydro-agricultural schemes and land tenure security	62 899	109.4
Indemnity Program for compensating the losses of agricultural production, ancillary structures to dwellings, heritage and sacred sites as well as revenues	18 639	32.4
Livelihood Restoration Program with measures to support the development of agriculture, pastoralism and livestock farming, forestry, fishing and commercial activities as well as the creation of income-generating activities	29 070	50.6
Transition Support Program including support for displacement, assistance for vulnerable people, support for tenants, support for land property commissions (COFOB), development of the river banks at Ayorou, support for grievance management, capacity building for security	6 930	12.1
Costs associated with the implementation of the RAP2A, including supervision, monitoring and evaluation	13 427	23.4
RAP2A TOTAL BUDGET	241 583	420.1

Note: Exchange rate is FCFA 575 = US\$ 1.

As part of the discussion to secure financing for the PAR2A, the international donors and the ABK decided to also finance, during this first phase, the improvement of access roads to the right bank resettlement sites and the updating of the RAP-Mali. These two components will be carried out during this first phase and represent a respective cost of FCFA 6 654 and 250 million. Consequently, when adding these two components, the total RAP2A budget reaches FCFA 248.5 billion or US\$ 432 million.