

REPUBLIQUE DU NIGER

FRATERNITE - TRAVAIL - PROGRES

Présidence de la République

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 2B) 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 of 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 spillways initially designed at 224 m, which will be increased to permit a final operation of the reservoir at 228 m NGN. The left bank dike will be extended by 2 km to reach a length of 8.3 km long.

The dam will create a reservoir with an area of 297 km², of which 290 km² will be located on the Nigerien territory.

Impact Analysis

The main impact is the resettlement of 2,533 households (16,619 people) resulting from the raising of the reservoir from 224m (phase 2A) to 228 m. 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. The total number of households to resettle in phase 2 (phase A and B) reaches 8,088 which represents 49,620 people distributed in 23 villages or tribes.

To these numbers, we must add 365 households (2,451 people) surveyed in Mali as part of the Resettlement Action Plan for the people affected on the Malian territory². However, the PAR2B is only concerned with the people affected in Niger.

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, with a first phase of the impoundment of the reservoir to 224 m (phase 2A) and a second phase associated with the final operation of the dam at 228 m (phase 2B).

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

² Réactualisation du plan de réinstallation des populations maliennes affectées par la construction du barrage de Kandadji au Niger, Ayouba Moussa, mars 2018.

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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. This data will firstly need to be updated because more than 4 years will elapse between the January 7, 2017 end of survey date and the implementation of compensations due to the people affected during the second phase.

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 2,533 households to be displaced corresponding to 16,619 people in 9 villages in the Tillabéri Region. The city of Ayorou includes 45 % of the people to be resettled.

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

- Commune of Ayorou: Ayorou, Firgoune, Garey, Koutougou, Yassane and Gaoudel.
- Commune of Bankilaré: Misgadean II, Malagazen I and Malagazen II.

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%).

In the second phase, 2,741 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 Tillabéri 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 2,533 eligible households that will be physically displaced during the second phase (Phase 2B), representing 16,619 individuals living in 9 villages or tribes. Out of these households, 284 are tenant households and 153 building owners were identified as non-residents of the impacted area.

According to the work completed to clarify agricultural land property, 2,153 landowners of agricultural land are eligible for resettlement in the second phase. Out of these owners, 65% are also crop producers and 83% will be physically displaced (loss of housing) during this second 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. As more than 4 years will elapse between January 7th, 2017 and the beginning of the payment of the indemnities or compensations due to the people affected during the second phase, data collected on the PAP during the 2016-2017 census will need to be updated.

Identification of Losses

The main losses of property in the 9 villages and tribes include:

- 4,860 private residential buildings, built on 2,378 residential plots;
- 12,796 structures adjoining dwellings or investments on farmland;
- 9 elementary schools and 1 preschool;
- 1 type 1 health center, 1 type 2 health center and 1 basic health center;
- 4 standpipes, 8 boreholes, 2 improved traditional wells;
- 31 public or community assets;
- 11 assets of the agricultural or pastoral infrastructure, including 3 cereal banks;
- Added to this are cultural and worship assets including 4 Friday mosques.

Regarding agricultural losses, 2,379 hectares, representing 2,732 agricultural plots of land, will be inundated by the reservoir during phase 2B. To these plots, we must add 464 hectares that will be lost due to the construction of the resettlement sites in phase 2B and 1,151 hectares that will be lost due to the development of hydro-agricultural schemes offered in compensation.

The losses of annual crops represent 2,714 hectares and those of perennial crops (trees) represent 81,967 trees. To these losses are added about 5,100 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 residential plot;
- 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 1,439 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

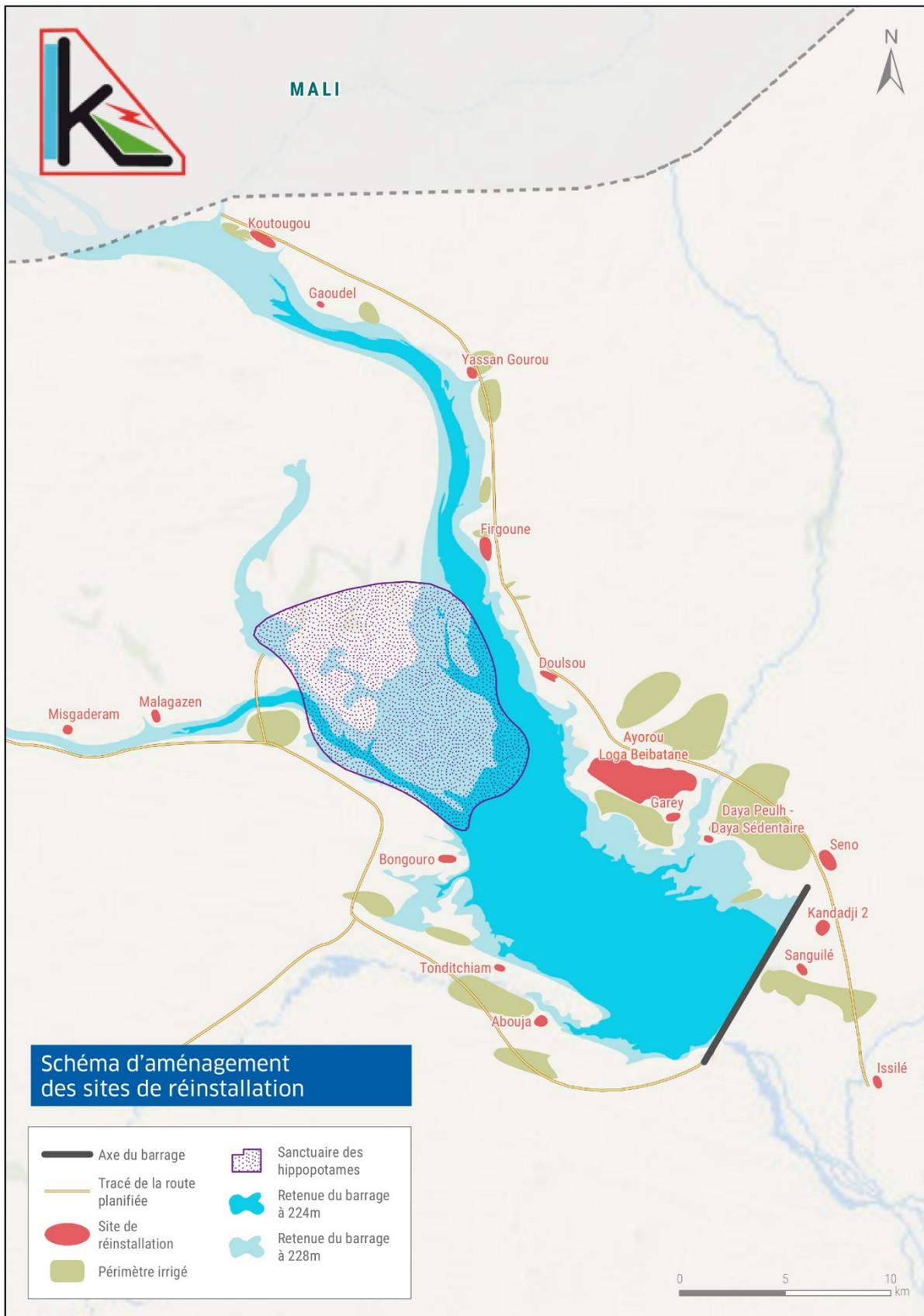
Five new sites and three extensions of existing sites will be built around the reservoir for the purposes of the second resettlement phase, taking into account the final operating level of the project at 228m and the various planned developments. These sites are located in two communes (municipalities) in the Tillabéri Region: Ayorou and Bankilaré.

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 residential plots 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 is 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.

Commune	Resettlement sites	Resettled Villages	Number of households	Number of people
Ayorou	Ayorou	Quartiers Ayorou	1,113	7,449
	Firgoune	Quartiers Firgoune	307	1,899
	Gaoudel	Gaoudel	56	389
	Garey	Quartiers Garey	181	1,287
	Koutougou	Koutougou	462	3,025
	Yassan Gorou	Yassane	202	1,177
Bankilaré	Malagazen	Malagazen I and II	147	907
	Misgaderan	Misgaderan II	65	486
Total			2,533	16,619

The area required for the resettlement sites is estimated at 464 hectares, of which about 50% will be for the residential areas. A portion of these 464 hectares (i.e. 313 hectares) will be secured during the first phase, in order to have access to the required land for expanding the three sites partially developed in the first phase. (Ayorou, Firgoune and Garey.)

Housing, Infrastructure and Social Services

4,985 residential buildings will be built with improved mud bricks (stabilized mud bricks) with a sanitary facility per fenced plot.

The development of a water treatment plant and distribution network by standpipes for all resettlement sites is planned for the first phase. Likewise, the sourcing of electricity for the resettlement sites is planned for the first phase via a power transmission line built on the left and right banks of the river.

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

- Construction of 6 literacy centers, 14 preschool classes, 55 elementary-school classes and 9 teachers' houses meeting national standards, including equipment and operating costs;
- Rehabilitation of existing educational infrastructure;
- Construction of 3 type 1 integrated health centers and 2 type 2 integrated health centers including equipment and operating costs;
- Construction of a Friday mosque on each site, i.e. 7 Friday mosques and 34 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;
- 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 1,439 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 which will build on the measures put in place during the first phase:

- 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 provision for the development of public infrastructure in the villages not displaced in the first phase, if the transition period is prolonged between the two resettlement phases;
- 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.

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 RAP2B 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, ten public consultations took place from July 30 to August 13, 2018, including two economically affected villages (Gaya and Kolmane) by the loss of agricultural land. 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 affected villages in particular at the beginning of the first phase of resettlement, 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 RAP2B components. He will put in place the necessary means to ensure a satisfactory execution of the RAP2B. He will ensure the planning of the overall RAP2B 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 RAP2B is estimated at 6 years, with an overlapping of activities of PAR2B and PAR2A after the impoundment of the reservoir.

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 RAP2B will be the responsibility of the ABK. External monitoring and evaluation will be carried out by an independent consultant.

Budget of RAP2B

The overall budget of this resettlement action plan represents an estimated total of FCFA 97 billion or US\$ 168,7 million, allocated as follows.

Cost estimation	FCFA Millions	US\$ Millions
Preparation and development of 8 resettlement sites and land tenure security	2 956	5.1
Construction of residential buildings, sanitary facilities and plot fences	33 642	58.5
Construction of public education and health infrastructure as well as community and administrative infrastructure, including worship assets	5 535	9.6
Water supply with construction of standpipes	90	0.2
Rural electrification on the left and right banks of the river	1 620	2.8
Compensation of agricultural land losses with preparation of hydro-agricultural schemes and land tenure security	16 760	29.1
Indemnity Program for compensating the losses of agricultural production, ancillary structures to dwellings, heritage and sacred sites as well as revenues	6 423	11.2
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	14 318	24.9
Transition Support Program including support for displacement, assistance for vulnerable people, support for tenants, support for grievance management, capacity building for security, support for agricultural producers and provision for the development of public	5 393	9.4

infrastructure in the villages not displaced in the first phase, if the transition period is prolonged		
Costs associated with the implementation of the RAP2B, including supervision, monitoring and evaluation	10 286	17.9
RAP2B TOTAL BUDGET	97 023	168.7

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

During the second phase, the Mali resettlement action plan (PAR-Mali), subject of a separate study and estimated at FCFA 4.5 billion, should also be implemented. This addition increases the total budget for accomplishing the overall resettlement operations in phase 2B to FCFA 101.5 billion or US\$ 176.6 million.