

I. PROJECT SUMMARY

| Country: | Republic of Guinea | | |
|-----------------------------------|---|--|--|
| Project title: | Support for the Development of Aquaculture in Haute (Upper) and Moyenne (Middle) Guinea Regions | | |
| Project Objectives: | Contribute to the improvement of food and nutritional security through the development of fish farming in rural areas | | |
| Related SDGs goals | SDG 1, 2 & 5 | | |
| JSB Priority | Food security and nutrition improvement | | |
| Sector: | Aquaculture | | |
| Proposed budget: | Total Budget: \$3 135 725 USD Russian TFD funding: \$1 549 865 USD Government of Japan: \$1 000 000 USD UNDP: \$341 380 USD Government of Guinea: \$244 480 USD | | |
| Implementation period: | 36 months (Three years) | | |
| Implementing Agency: | Agence Nationale de l'Aquaculture de Guinée (ANAG) National Agency of Aquaculture of Guinea | | |
| Project Locations: | Haute and Moyenne Guinea regions | | |
| Beneficiaries: | 25,588 direct beneficiaries including 78% of women | | |
| Country Office Contact person: | Name, Title: Luc Gregoire, Resident Representative, Tel: (+224) 629 00 69 69 Email: luc.gregoire@undp.org | | |





Brief Description

Despite its huge natural and mineral resources, Guinea is amongst the least developed countries in the world. According to the Human Development Report (2018), Guinea ranks 175 out of 189 countries, despite the return of economic growth from 3.5% in 2015 to 6.7% in 2017. Food insecurity affects 21.6% of households and 31.3% of children under 5 years suffer from chronic malnutrition. The deficit in animal protein in food consumption, shortage of food production, low level of income and sources of diversification are the main causes of food insecurity. Discriminations against women, especially in rural areas where they are the main productive force, contribute to exacerbate the vulnerability of households.

The Moyenne and Haute Guinea regions are particularly vulnerable to food insecurity. Not only do they face low rainfall compared to other regions and are exposed to natural disasters, but they are continental regions with no sea borders. Nonetheless, the potential of the regions should not be overlooked as they house most of the country's major rivers and watercourses with important fish farming capacity.

Fish remains an important source of animal protein for the Guinean population, but the production of marine and inland fisheries is decreasing dramatically and its contribution to the population food and nutritional security may still decline in the coming years as a result of demographic growth and environmental factors. Fish farming becomes a sustainable alternative (i) to meet the demand for fish, (ii) to diversify the rural income, (iii) to empower women and (iv) to create jobs for the youth.

The project aims to promote the development of sustainable fish farming in Moyenne and Haute Guinea regions with the following expected results: i) The technical and operational capacities of the Guinean National Agency for Aquaculture (ANAG) and its decentralized services are strengthened to provide better technical support and monitoring of fish farming; ii) 50 fish farming sites are developed and stocked with fingerlings (fry) and iii) the availability of fish in the local market is increased.

Contributing UNDAF Outcome:

By 2022, the national institutions, civil society and the private sector will have implemented the policies that improve food security, sustainable management of environment, resilience of populations to climate change and disaster risk management.

Indicative CPD Output:

The most vulnerable groups, particularly women and youth, have increased capacities for resilience and adaptation to climate change.

| Total resources required: | \$ | US 3,135,725 |
|---------------------------|---------------|----------------|
| Total resources | TFD: | \$US 1,549,865 |
| | Co-financing: | \$US 1,586,523 |
| allocated: | Japan: | \$US 1,000,000 |
| | UNDP: | \$US 341,380 |
| | Guinea | \$US 244,480 |

Approved by (signatures):

| Government | PNUD |
|---|--|
| FRÉDÉRIC LOUA Ministre des Pêches, de l'Aquaculture et de l'Économie Maritime | LUC J. GRÉGOIRE Représentant Résident Au service des pauvies et de |
| Date:/2020 | Date: 2.1 2020 wast |



II. BACKGROUND AND DEVELOPMENT CHALLENGE

(1) Situational analysis

Guinea is one of the largest West African countries with a surface area of 245.857 km² and a total population size of 10,523,261 inhabitants in 2014¹. The country is endowed with important natural resources, mineral resources including bauxite, diamonds and gold, a vast expanse of both agricultural and forest lands, abundant rainfall as well as hydropower potentials which favors the diversification and development of its economy. The country engaged in a positive dynamic reform driven by the 2040 Guinea Vision and the National Economic and Social Development Plan (PNDES 2016-2020). Relationships with traditional partners are deepened, and a more active policy is pursued towards non-traditional actors.

Despite its huge natural potentials, Guinea ranks amongst the least developed countries in the world. In 2012, more than half (55.2%) of Guineans, lived below the poverty line. According to the UNDP global Human Development Report (2018), Guinea ranked 175 out of 189 countries, despite the return of economic growth from 3.5% in 2015 to 6.7% in 2017.

To realize its potentials and speed the process of structural transformation, the country has to improve its overall governance. The Mo Ibrahim Index of African Governance ranks Guinea 37th out of 54 countries with a score of 45.9. In terms of governance, the challenges are mainly institutional, especially in the administration. One of the most important is the coordinated application of the implemented decisions for the vision and policies by the responsible institutions, and the imposition of sanctions when necessary.

Women represent 51.7% of the population and a third of Guineans are young people aged 15 to 35. There are large discrepancies between women and men, according to the OECD Gender Index (SIGI-Index, 0.567 in 2018). Women are underrepresented in public life, politics and decision-making positions. They represent 11.4% of the members of the Government, 21.9% in the National Assembly, 29.8% among the civil servants and less than 7% in the communal councils of the local communities. Despite their strong contribution to rural development, 80% of women face discrimination in access to land and productive resources. Notwithstanding the ratification of the main international instruments relating to women's rights, women's social status is still largely governed by traditional rules and practices, subordinating them to men, resulting in several forms of violence and discrimination.

Guinea is a patriarchal society and the lands belong to the men of the family and/or lineage according to customary law. In the case of expropriation related to a mining activity or projects of public interest, women do not receive the sums collected by the household as compensation. Similarly, in the event of the death of the husband, the property of the deceased is shared between the men of the family and it is rare that the wife inherits the land. Thus, in case of loss of land either because of expropriation or following the death of the husband, women are the first to lose their livelihood.

Agriculture is the main source of employment in Guinea and is critical for poverty reduction and rural development. The sector provides income for 57% of rural households and employment for 52% of the workforce. Food insecurity is high and affects 21.6% of households at the national level and the situation is worse in rural areas with 25.7% rate (12.7% of urban areas) which affect specially women and children. Chronic malnutrition affects 31.3% of children under the age of 5 years and 6.1% suffer from acute malnutrition. Food insecurity in Guinea can be explained, among other things, by an unbalanced food consumption characterized by a deficit in animal protein, a shortage of food production due to the needs of households, a low level of income and sources of diversification. Women are very active in commercial activities, but they are only 11% among market administrators. Within households, women decide on the family diet only in 20.5% of cases.

In Guinea, food insecurity to a large extent is linked to the dependence on rainfall for agricultural production and the natural disasters that threaten the populations. Aquaculture provides an alternative solution to reducing food insecurity and child malnutrition as it guarantees the production of fish year-round. The full potential of the aquaculture remains largely unexplored.

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¹ RGPH 2014

(2) Potential of aquaculture in Guinea

Guinea withholds a vast potential in aquaculture (fish farming) both in salt and fresh water. Guinea has a 300 kilometers coastline opening along the Atlantic Ocean. The country has 116 rivers and an annual rainfall of about 1,651mm, hence the nickname Water Tower of Africa.

According to the National Economic and Social Development plan (PNDES) the fisheries sector represents 3.6% of GDP, will generate some 100,000 direct jobs (25,000 for inland fisheries and fish farming) and 40% animal protein consumed nationwide (FAO, 2005). Inland fishing is mostly practiced in the Moyenne and Haute Guinea regions, with a potential production capacity of 13,500 tons per annum.

Fish farming, including family-based integrated fish farms on nearly 2000 sites are being developed in Forest Region. In Moyenne and Haute Guinea regions, ponds, confluences of rivers and swamps, irrigated areas, gold, and diamond excavations offer opportunities for fish farming. Ponds water exist everywhere in Guinea: flood plains on major rivers such as Niger, Senegal, and the Gambia. In the region of Kankan, results from a regional census identified 380 permanent and 758 seasonal ponds. The fishery in the ponds is a traditional activity in Haute Guinea region and women are deeply involved.

(3) Necessity

The malnutrition is the result of the inadequacy of the food ration. The recovery of livelihoods of these affected population, particularly the source of animal protein is a necessity. In Guinea, fish accounts for 40% of animal protein consumed. Unfortunately, marine harvest registered a remarkable reduction and their role in food and nutrition security is likely to further decline in the coming years due to international fishing competition and population growth. In addition, due to environmental degradation, inland fish farming is becoming less successful.

These factors have had a negative impact on the regularity and quality of the supply of fish to the population as well as affects the average consumption rate per inhabitant per annum which is evaluated at about 11 kg, which is a significant reduction in comparison with the 25 kg that was projected between 1998-2008. This deficit of fish supply affects particularly rural areas where children chronic malnutrition is already high (19,8% in Kankan region and 24,70% in Labe region). Faced with this situation, the development of fish farming is envisaged as a sustainable alternative to satisfy the ever-growing demand for fish, diversify the financial source of revenue, increase women's incomes and create jobs for women and young people in rural areas. Fish consumption to date remains an important source of animal protein intake by the population of Guinea.

(4) Past interventions and lessons learnt:

Since 2008, many fish farming initiatives, often associated with rice farming, have been conducted in forest Guinea. Undoubtedly, the positive results obtained within this context have encouraged the government to place fish farming among the activities to prioritize in its objectives to tackle food and nutrition security, youth and women's empowerment (job creation) and income generation especially in rural areas. Indeed, this fishing practice in the forest region has put forward some lessons learned which are the following, amongst others:

- Fish farming can contribute to meet the challenge of food and nutritional security in the country, particularly in rural areas as evidenced by the final evaluation of the previous "Project for the Development of Rice-Fish Farming in Forest Guinea (PDRP-GF)". Based on the production of 20 fish farmers, 1,850 tons of fish were sold on rural markets at prices accessible to the populations not to mention auto consumption. This contributed to increase the rate of fish consumption (5 kg per year to 9 kg) in a population with a recognized protein deficit.
- Fish farming can contribute to income generation and thus empowering women and young people. Experience in Forest Guinea has shown that the income obtained from the sale of fish enabled fish farmers to increase and diversify the volume of their production activities by reinvesting in gardening or farming activities.
- Fish farming is an excellent instrument to protect the highly threatened environment of the country. The experience in Forest Guinea highlighted the benefits of fish farming on the environment as it favors the creation and maintenance of wetlands, which themselves would promote the rise of the water table (groundwater), the protection of springheads and the onset of new fish and bird species. In addition, with the use of animal (animal waste) and agricultural by-products in the fertilization of ponds, fish farming



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contributes on the one hand to the upkeep of soil fertility and on the other to a relative hygiene within the communities.

• Fish Farming helps to increase and diversify the local job offer, especially for out-of-school or graduate students. It benefits workmen for tasks not requiring much expertise and offers opportunities in the areas of site development, carpentry, plumbing, trade, etc., to qualified young people thus securing the youth preventing migration.

(5) Contribution to achieving SDGs:

Fish farming: a sector with huge economic potential and ecological sustainability.

Fish remains an important source of animal protein for Guinean populations, its contribution to the daily diet stands at 29% as of 2013. Its importance in rural areas, which account for more than 70% of the population and which rely mainly on agricultural activities, is major and represents nearly 85% of the total animal protein ingested². Fish farming enables and supports the creation of favorable conditions for different actors to earn maximum economic dividends to ensure the wellbeing of the population. With the envisaged fish production, producers will earn enormous benefits such as food, economic and ecological dividends. The local population will no longer be forced to import fish at high prices which will lead to nutrition/health benefits and household savings while also be able to manage the overfishing and devastation of natural resource to lower the pressure on marine life and environment. The project will contribute to SDGs 1, 2 and 5 and.

(6) Alignment with the national priorities of the Country Programme strategy

The formulation of this project is based on the "Strategic Document for Fisheries and Aquaculture Policy (DOCPA)", and on the field assessment conducted jointly by UNDP and ANAG. The project is thus aligned to the strategic axes of the national policy, guaranteeing the appropriation by the national actors. The project will be implemented through the national implementation modality. In fact, the planned actions will be implemented through the National Aquaculture Agency, the MPAEM's decentralized services, and the beneficiaries. These actors will benefit from capacity building. This inclusive approach will put local actors at the forefront throughout the implementation process and facilitate ownership and sustainability of the results. The lessons learned from the project will guide the fish farming dissemination strategy of ANAG in the country.

Contribution to the National Economic and Social Development Plan (PNDES): The project will contribute to the Pillar 2 of the PNDES, in particular to "sustainable and inclusive economic transformation". More specifically, it will contribute to the "food and nutrition security is ensured" outcome by improving the availability of animal protein and diversifying the livelihoods of rural communities.

Alignment with UNDP 2018-2022 country strategic Plan: The East Project is aligned with the Pillar 2 on the Country Programme Document (CPD): "Economic Transformation and Sustainable Management of Natural Capital" and will contribute to the result: "The most vulnerable groups have better resilience capabilities and adaptation to climate change".

III. PROJECT GOALS AND ACTIVITIES

Theory of Change

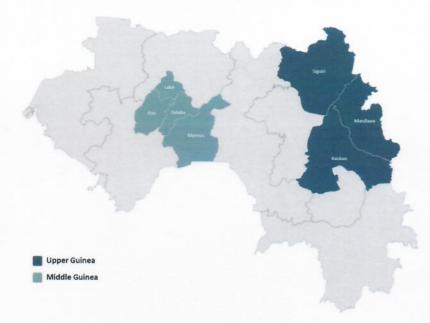
The statement is that the production of marine fisheries will decrease dramatically and its contribution to the population food and nutritional security may still decline in the coming years as a result of demographic growth. Similarly, environmental factors may affect inland fisheries and also contribute to the decrease of the fish quantities harvested. Given this situation, the development of fish farming has been assigned the objective of becoming a sustainable alternative to meet the demand for fish, to diversify the rural income, to empower women and to create jobs for the youth. Fish farming will contribute to the recovery of livelihoods for thousands of households affected bushfires.

² BSD-MPAEM / PNDES 2017



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Two types of fish farming are currently practiced in Guinea: rice-fish farming in the forest region and community-based aquaculture in Haute and Moyenne Guinea. This project targets two natural regions of Moyenne and Haute Guinea and will focus on community and entrepreneurial aquaculture.



During the rainy season, the fish are pushed back to the land by floods of rivers (Niger and its tributaries/streams). When the river recedes during the dry season, fish remain trapped in holes in the floodplain (ponds) where they grow and reproduce. Community-based aquaculture, which draws on the traditional fishing technique of catching fish left in the holes at the end of the dry season, is practiced at the community level. This traditional practice of seasonal fishing remains very limited and does not allow production in sufficient quantity and quality for the needs of the populations. The project plans to build on traditional knowledge in the locality by developing actions promoting the reproduction and growth of fish in ponds.

Figure 1 Areas of intervention

In a participatory approach, the project will promote the improvement of traditional techniques in order to increase production, by enhancing the socio-economic role of women, protecting natural resources and strengthening national capacities in this area in order to promote and perpetuate the practice. This change process will go through:

- Participatory identification of production sites considering the landscape, the traditional site practices, level of investment required to bring the site up to standard, social and environmental factors.
- Site-Specific community dialogue and sensitization will provide community commitments in the implementation of project activities. A committee will be set up for each pond to be built and will be responsible for managing the work and the entire process of the pond's operation.
- The implementation of the development works by a community approach and considering gender equity.
- The impoundment of the pond, fish stocking, and management;
- Progressive fishing following the stocking cycle.

The capacity building of ANAG, at the central and decentralized levels, as well as of fish farmers is at the center of the project implementation strategy. The project will focus on learning and sharing knowledge from advanced fish farming experiences in the forest region.

IV. RESULTS AND PARTNERSHIPS

Expected Results

<u>Output 1</u>: The Guinean National Agency for Aquaculture (ANAG) and its decentralized services have strengthened technical and operational capacities to provide better technical support and monitoring of fish farmers.

Due to the strategic importance of the development of aquaculture for the country, the National Agency of Aquaculture of Guinea (ANAG) was created by Decree No. 027/PRG/SGG/2018 dated July 12th, 2018. ANAG's mission is to implement the Government's Aquaculture Policy. The Agency is responsible for, among other things:

- · Coordinate, monitor and evaluate all activities and programs related to aquaculture,
- Promote and maintain professional relations with local and foreign development institutions in aquaculture,
- Coordinate the enhancement of sites favorable to marine and continental aquaculture, in collaboration with development partners;



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- Support the strengthening of management skills of Aquaculture professionals,
- Promote international cooperation regarding aquaculture.

Under this project, ANAG will play the role of implementing partner and will implement project activities with UNDP support. The agency headquarter is established in the capital Conakry and has seven (07) decentralized structures in the other regions of the country. The agency will deploy field monitors in targeted prefectures to provide technical support and capacity building to fish farmers.

The creation of ANAG is certainly recent, but this structure stems from the former National Directorate of Fish Farming from the Ministry of Fishing which has a rich experience in the management of fish farming projects. This directorate had successfully piloted the development of fish farming in the Forest Region where the project resulted in the establishment of a Regional Federation of Fish Farmers composed of 14 Unions and 223 grassroots groups.

To achieve the project objectives, and on a bigger scale to develop national capacities for the promotion of aquaculture, the project will contribute to the capacity building of ANAG.

Main activities:

ANAG has about 50 technical staff. These executives have very diverse profiles and are not always connected to their attributions or Guinean realities. The management applies a participatory and collaborative work approach in order to build staff capacity. However, due to the lack of resources, their work is limited to office work and some do not have practical experience in aquaculture. The action plan consists of:

- Facilitating hands-on training through daily counseling and coaching to advance skills and improve the organization and effectiveness of the agency;
- Providing consulting support in the management of the team to make the most of the potential of each executive;
- Providing practical training in fish techniques (management & fish management) to all managers to reinforce general and theoretical knowledge;
- Involving managers in fieldwork by providing them with the necessary technical tools.
- Set up an operational mechanism for ANAG at national and decentralized levels.
- Provide logistical support for fish farming monitoring and sector management;

Activities under this output will benefit the ANAG national headquarter in Conakry and decentralized services at regional and prefectural level. The capacity building of ANAG will be done in close collaboration with JICA which provided a Japanese expert in aquaculture to the Agency.

Output 2: 35 fish farming sites are developed and stocked with fingerlings.

The process of developing community aquaculture is long and requires close monitoring and supervision. The actions to be carried out will be adapted to the socio-economic and climatic contexts of each locality.

A participatory approach will be adopted with the involvement of the different actors and the empowerment of the beneficiaries. The sites that will be developed and/or upgraded to technical standards that will benefit from the production of fish cores (fingerlings) and breeding stock to be purchased from Forest Guinea region where the fish farming activity has been going on for the past ten years.

Identification of the 35 new sites:

Based on a technical assessment mission conducted in the Middle and Upper Guinea regions, 35 new sites have been identified following the below criteria:

- Motivation of the community to invest itself in the fish farming activity;
- Site Accessibility;
- Distance from the operating community village below 3 Kms;
- Water regime (temporary or permanent);
- Site operated by a single community (1 village);
- Site area (significant area required for project intervention);
- Human Resources availability for the activity;
- Location of the site in relation to the river (quality of the site / river channel);
- Existence of a bowl;

Based on the above criteria, the identified sites the following:



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| No | Prefecture | Commune | District / Village | Name of Site |
|----|-----------------|---------------|--------------------|----------------------------|
| 1 | | Tintioulén | Ourémbaya | Kouradalaba |
| 2 | | Urban Commune | Sanankoro | Groupement Sacko |
| 3 | KANKAN | Bâté Nafadji | Guirilan | Guirilan |
| 4 | | Bâté Nafadji | Bakonko Cisséla | Bakonko Cisséla |
| 5 | | Bâté Nafadji | Fodékariah | Fodékariah |
| 6 | | Kignèbakoura | Toyiwoulén | Konkobalén |
| 7 | | Niandankoro | Damissakoura | Massadèguè |
| 8 | SIGUIRI | Nounkounkan | Banfèlèkoura | Kadalé |
| 9 | | Franwalia | Franwalia -centre | Konikoundjian |
| 10 | | Kignèbakoura | Djiomabana | Djiomabana |
| 11 | | Morodou | Dalankan | Djiondala |
| 12 | | Faralako | Falama | Kissalédén |
| 13 | MANDIANA | Kantoumanina | Kigneba | Minaboroma-dala |
| 14 | | Faralako | Sountoudjiana | Solidalanin |
| 15 | | Faralako | Dogolén | Kobada |
| 16 | | Timbo | Wangako | Wangako (étang de barrage) |
| 17 | | Ouré kaba | Sambayah | Sambayah |
| 18 | MAMOU | Tolo | Tolo | ENAE |
| 19 | | 1010 | Morondè | Bafing |
| 20 | | Urban Commune | Kampama | Horè Konkouré |
| 21 | | Garambé | Labédèppèrè | Dima |
| 22 | LABE | Garanibe | leysourirè | FAPA |
| 23 | LABE | Popodra | Popodra centre | Site colonial |
| 24 | | Diari | Madina koula | Thiangui |
| 25 | | Urban Commune | Tènè 1 | IFAC |
| 26 | | Orban Commune | Tènè 2 | IFAC |
| 27 | | Bodiè | Languè | Languè (Marre) |
| 28 | DALABA | | Madina | Madina (Marre) |
| 29 | | Kankalabé | Kouffa | Kouffa |
| 30 | | | Dougako | Dougako (Etangs) |
| 31 | | Kebally | kanniba | kanniba |
| 32 | | Urban Commune | Koubi | KOUBI (bassins) |
| 33 | DIT. | Brouwal Tappè | Mitty | Hakoude Mitty (étangs) |
| 34 | PITA | Timbi Touni | Timbi Touni | Djoulasso (étangs) |
| 35 | | 1 imbi 1 ouni | Timbi Touni | Ndingha (étangs) étang |

Furthermore, six additional (6) sites will be identified and selected to serve as a local fingerling production unit to supply fish farmers in the targeted regions. The existing private sites of fish farmers aligned with the criteria of such a unit will be preferred.

Finally, about ten (10) existing community sites will benefit from a substantial support in training and fingerling stocking.

Main activities:

Conduct an evaluation of the existing sites in the two regions and select 35 sites

This evaluation will collect all data on existing sites. The data to be collected include: the topography of the site and the plain, the characteristics of the pond (permanent, temporary, duration of floods), type of vegetation on the site, soil fertility, distance from the site to the river, distance from the site to the village, number of villages exploiting the pond, traditional owners, species of fish and quantities harvested in the past, lessons learned from previous experiments on the site, etc. This assessment will also help identify material and labor needs and estimate the realistic cost of development for each site. The evaluation will lead to the participatory selection of the 35 sites. This is a very important step as the choice of the site is decisive for the success of the production.



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Site development works:

It essentially consists of land clearing, excavation, and earthworks. It must necessarily be done before the rainy season, using local labor. The size of the hole varies depending on the topography of the site, the will of the operators and environmental considerations. The project will provide the necessary tools (wheelbarrows, shovels, picks, etc.) and will pay the labor.

Strategy for yield optimization (species selection, nutrition, invasive species treatment and storage of fishery products)

Livestock species and nutrients used in fish farming

The project will target three species commonly raised in polyculture in Guinea: Oreochromis niloticus (Nile tilapia), Heterotis Niloticus and Heterobranchus Isopterus. Monoculture is not widespread in the country as the producers

always look to maximize fish production by making the best use of the different trophic sources of the pond. Stand density depends on the natural productivity of the environment and the ability of the farmer to provide additional







nutrients (animal feed or fertilizer). The storage weight varies between 15 and 30 g for tilapia. Mixed farming is common, although the most experienced fish farmers are able to do manual sexing in their service ponds in order to grow monosex tilapia.

The invasive nature of the Oreochromis Niloticus will be mitigated by the introduction of the Heterobranchus Isopterus which diet also incorporates O. niloticus larvae, thus regulating the fish population.

Nutriments

The agro-ecological fish farming practiced in Guinea is generally based on the use of agricultural, animal or household by-products. Commercial feed and organic seed produced locally or imported are not available. The relationship between the natural nutrients, the stocking density, and the expected market size determines the cycle duration, which varies between 6 to 9 months. When available, rice bran can be used but the recent development of poultry and cow farming in rural areas as frequently led to low availability of this efficient but expensive by-product. As a result, some fish farmers have opted to fertilize their ponds by using animal wastes or integrated animal-fish farming (3 to 5 pigs per site). The quantities and volumes of by-products distributed are not monitored so that the efficiency of each for the growth of fish is not well known. However, some tools for managing an optimal fertility level of the pond are already taught through measurements or visual observations of the fertility level.

Project activities also include: strengthening of three fingerlings production units which will be established in each prefecture, support stock taking and production cycle management, provide producers with locally tested and produced feeds and fertilizers, develop training sessions for fish farmers and community leaders.

Production:

All of the sites, including the six fingerling production units, will be involved in the stocking process. The fish production sites will be regularly monitored to assess fish growth. On the other hand, the six fingerling production units will benefit from monitoring of the size, quantity, and fertility for optimal seed production.

During the various production and breeding cycles, monitoring fishing will be conducted every 30, 45 and 120 days to ensure fish growth and reproduction. Fertility checks will be assessed by appropriate tools. Other parameters such as PH, temperature, and oxygen could be controlled with appropriate equipment acquired for this purpose. After these stages, the producers will ensure the maintenance of the sites by cleaning dikes, water inlet, and outlet channels, water filtering devices to ensure a good production environment and avoid the presence of predators. Depending on the species, stocking size, density, and market-related decision of producers, the total or partial fishing





for commercialization and consumption will be planned for each site. This fishing calendar will depend on rainfall conditions.

ANAG will ensure the provision of fingerlings at each project site in the early stages of the project. The "package" that will be harmonized for all sites will include the following species:

- Breeding Tilapia
- · Tilapia Pre-breeding
- Tilapia fry
- Pre-breeding catfish
- Catfish fry
- Breeding Heterotis
- Heterotis Pre-breeding
- Heterotis fry

Output 3: Availability of fish in the local market is increased

In fish farming, fish can be harvested all year round. Ponds should be loaded (pocketed) at different times, depending on fluctuations in local market demand.

The sale of fish is an essentially female activity. A survey will be conducted to assess the needs of women fish vendors and their marketing methods. The aim of the approach is to lead to a better structured and organized sector and a mastery of the commercial circuit, of the fluctuation of demand and prices. The project will raise awareness among producers to make their productions profitable by techniques and methods of managing production cycles. For this purpose, calendars relating to stocking dates, species sizes, and growth gains will be established.

To rationalize the development of project activities, including the commercial value chain, quality materials will be purchased and made available to women identified, trained and organized for fish processing and marketing.

Main activities:

- Sensitize producers to organize the fish production cycles according to market demands;
- Support women-led commercialization schemes: provide equipment support for both transformation and commercialization;
- Monitor the fishing calendar to ensure the gathering of production and commercialization data.

Resources required to achieve the Expected Results

To achieve these results, it is necessary to mobilize financial and human resources. The budget for the implementation of the project amounts to \$3,135,725 USD ventilated as follows:

- \$1,549,865 USD from the Government of Russia;
- \$1,000,000 USD from the Government of Japan;
- \$341,380 USD from UNDP and;
- \$244,480 USD from the Government of Guinea;

Below is the budget summary by output:



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| EXPECTED OUTPUTS | Total Budget | TFD Budget | Co-financing Budget |
|---|-----------------|---------------|------------------------|
| OUTPUT 1: The Guinean National Agency for Aquaculture (ANAG) and its decentralized services have strengthened technical and operational capacities to provide better technical support and monitoring of fish farmers | 530,460 | 244,560 | 285,900 |
| OUTPUT 2: 35 fish farming sites are developed and stocked with fingerlings. | 1,424,000 | 714,900 | 401,440 |
| OUTPUT 3: Availability of fish in the local market is increased | 230,000 | 85,000 | 709,100 |
| Communication, Monitoring and evaluation | 250,000 | 130,000 | 120,000 |
| Coordination and management | 513,000 | 260,600 | 252,400 |
| SUB-TOTAL | 2,947,460 | 1,435,060 | 1,512,400 |
| GMS 8% | 188,265 | 114,805 | 73,460 |
| TOTAL BUDGET | 3,135,725 | 1,549,865 | 1,585,860 |
| % | 100% | 49,43% | 50,57% |

INNOVATIVE SOLUTIONS AND EXPERTISE

The project adopts very innovative solutions. Fish farming is integrated with family agriculture. For feeding of fishes, only organic waste such as cow pods is used. The pond water thus fertilized is used for gardening production. This integrated farming practice improves gardening production. It contributes to reducing the use of chemical fertilizers that have adverse effects on the environment and biodiversity. The extensive fish farming model is also a factor in restocking fish streams as it reduces pressure in inland fisheries practice.

PARTNERSHIPS

The project is based on the partnership between the different stakeholders, including the Federation of Russia through the embassy in Guinea, Government of Guinea as well as UNDP. The Federation of Russia is the main donor and provides financial support via the provision of project resources. These resources are entrusted to UNDP-Guinea, which is responsible not only for their management but also for the optimal achievement of the project's expected results.

The Implementing partner is the *National Aquaculture Agency of Guinea (ANAG)*. ANAG will play the role of the project owner and is the target for output 1. Through its decentralized services in the targeted prefectures and the Kankan region, ANAG will implement project activities in the field.

UNDP will support ANAG when necessary, monitor project activities and provide advice to improve their performance. According to project needs and in agreement with ANAG, UNDP will provide specific services to ANAG as part of the project activities. These services include the recruitment of staff and consultants, procurement, communication, final project evaluation, etc.

The project will seek synergies with ongoing Russian development assistance projects and would also collaborate with Russian business associations to promote use of Russian expertise from the business sector in the project. In partnership with UNV, the project will engage with Russian volunteers within the project teams.

Risks and Assumptions

Certain risks and constraints could have a negative impact on the implementation of the project. These include:

- Socio-political unrest linked to the electoral calendar and/or social demands;
- The deterioration of the security situation in the country, particularly in the project area;
- · Significant rainfall deficit;





- · Lack of effective commitment of ANAG staff:
- · Lack of transparency in the use of project resources;

Necessary measures will be taken to anticipate these risks and reduce their impact on Project implementation.

| Risks | Probability (High, Average, Low) | Impact (High, Average, Low) | Mitigating Actions (Responsible person/unit) |
|--|----------------------------------|--------------------------------------|---|
| Socio-political unrest | Average | High | Promote inclusive dialogue between political and social actors to ease tensions. |
| Deterioration of the security situation in the country | Low | High | Follow the UNDSS safety instructions |
| Significant variation in rainfall in the region | Average | Average | Closely monitor the evolution of rainfall; Anticipate seed fishing and transfer to other sites; |
| Social conflicts related to water management | Low | Low | - Strengthen community dialogue for shared management of water resources; |
| Lack of effective commitment by ANAG staff | Low | Average | Develop community engagement; Regular consultation with the ANAG management to motivate the teams; Strengthen monitoring. |
| Lack of transparency in the use of project resources | Low | High | Train the partner on management and national execution modalities; Perform regular spot checks. |

Stakeholder Engagement

All the prefectures have a potential, but the project will target the prefectures of Kankan, Kouroussa and Siguiri. These three prefectures are selected based on the following criteria: i) the importance of the potential, ii) the dynamism of the populations in the practice of fish farming, the demand and accessibility of the area considering the project duration of one year. However, this targeting could be revised according to the results the baseline study and the necessity of coordination with JICA which is also engaged in the region. The project will directly benefit to 25 588 people including 78% of women.





| Project Outrute | Trans of homoforening | | T | Num | Number of Persons | sons |
|---|--|---|---|-------|-------------------|---------|
| sinding pafarr | Types of beneficiaries | frow will the project benefit the target? | l argeung identification method | Men | Women | Total |
| The technical and operational capacities of the Guinean | Executives from ANAG and Deconcentrated Directorates | Training and provision of equipment | ANAG central management and decentralized services in the Middle and Upper Guinea regions | 09 | 12 | 72 |
| National Agency for Aquaculture (ANAG) | Technicians and young trainee graduates | Training, participation in studies and monitoring | ANAG based on project needs | 35 | 10 | 45 |
| and its decentralized services are strengthened to | Students of the ENAE (Bordo) College and University of Dalaba | Participation in theoretical and practical training sessions | The identification will be made with the school management (ENAE+ISSMV) following the concerned sectors | 530 | 130 | 099 |
| technical support and monitoring of fish famers. | Introductory training for young graduates in fish farming entrepreneurship | Participation in retraining and youth settlement National Office of Employment and training sessions related to immigration | National Office of Employment and Manpower | 400 | 50 | 450 |
| | Producers | Grants for activities and training | Based on the technical evaluation of the sites and the criteria of the projects | 310 | 133 | 443 |
| | Laborers | Participation in paid community development work | Will be identified by local leaders according to the needs and criteria of the project | 221 | 72 | 293 |
| 35 fish farming sites (5 for each prefecture) | Fishermen | Participation in community fisheries | Following the traditional customs managed by local leaders. | 2 216 | 17 100 | 19316 |
| are developed and stocked with | Netters | Participation in training sessions on indicative standards of fishing types and materials | Baseline Study | 133 | 44 | 177 |
| fingerlings. | Carpenters | Participation in training sessions on indicative standards for types and materials of formwork | Baseline Study | 44 | 0 | 44 |
| | Sharing of experiences between farmers | Participation in exchange trips and innovation platforms in management and transformation (value chain) | Producers and service providers from other regions in relation with those of the project areas | 200 | 300 | 800 |
| Availability of fish in | Populations | Participation in awareness/informative sessions on the intervention strategy and modality | Community mobilization | 988 | 1 330 | 2 2 1 6 |
| the local market is improved | Fish smokers and traders | Participation in training sessions on standards indicative of the types and material for trade and processing | Baseline Study | 186 | 988 | 1 072 |
| | | TOTAL | | 5 521 | 20 067 | 25 588 |



Sustainability and Scaling Up

The formulation of this project is based on the "Strategic Document for Fisheries and Aquaculture Policy (DOCPA)", and on the field assessment conducted jointly by UNDP and ANAG. The project is thus aligned to the strategic axes of the national policy, guaranteeing the appropriation by the national actors. The project will be implemented through the national implementation modality. In fact, the planned actions will be implemented through the National Aquaculture Agency, the MPAEM's decentralized services and the beneficiaries. These actors will benefit from capacity building. This inclusive approach will put local actors at the forefront throughout the implementation process and facilitate ownership and sustainability of the results. The lessons learnt from the project will guide the fish farming dissemination strategy of ANAG throughout the country.

The specific considerations for project sustainability for the two regions could be outlined as followed:

Fish farming has been traditionally practiced by the communities for many years now. They are familiar with concept, understand their constraints and know their needs. To maximize community ownership and sustainability, the project will leverage on this existing practice, in a participatory fashion, to further develop fish farming and introduce more efficient approaches.

Fish farmers are at the very core of aquaculture. They are key stakeholders with a direct impact on the success of the activity. Their current practices are not the most efficient (both economically and environmentally). Despite their strong desire to develop fish farming, the barriers they face are, amongst others, their very little knowledge of best and modern practices, lack of equipment and meagre financial resources. To improve their capacities and address these barriers, the project will seek to train fish farmers in the fish farming techniques and best practices, provide them with equipment to monitor their activities and fingerlings stocks to address the initial financial constraints of the activities.

The National Agency for Aquaculture, newly established structure for the promotion of Aquaculture in Guinea, still needs early capacity building to fulfill the roles and responsibilities it is entrusted with. To ensure post-project sustainability, it is essential to strengthen the technical and operational capacities of the agency and its decentralized services. Through this project, logistical and transport equipment will be provided for operational and monitoring activities, IT equipment and supplies for office activities and finally training will be provided to strengthen technical abilities. Moreover, an international aquaculture expert will be contracted to assist the agency and provide coaching as well.

The nature of fish farming requires a meticulous identification of the sites to ensure sustainability. In addition to the sustainable water retention rich in nutriments (plankton), the site must be sufficiently close to the populations to ensure close monitoring from the fish farmers. The sites identified by the project meet those parameters and a particular attention will be paid to the quality of the damming for the newly created fish farming infrastructures.

Finally, political will for such activity is essential for its sustainability. The economic potential of aquaculture is acknowledged by high political authorities and the desire to promote the activity lays in the recent creation of the National Aquaculture Agency and in the elaboration of national strategic documents.

V. PROJECT MANAGEMENT

Cost Efficiency and Effectiveness

Project activities will be implemented by national partner ANAG and therefore UNDP only requires a light team of three staff member for monitoring and capacity development of partner. UNDP team will integrate ANAG sub-office in Kankan and share the same facilities. In addition, UNDP operational and technical staff based in the region for AbE³ Programme will support the project activities. This integrated approach will guarantee cost efficiency and effectiveness.

Project Management

At the operational level, the implementation of the project will be conducted by the Kankan-based management unit. This management unit will be under the responsibility of the Project Manager recruited by

³ Adaptations Basée sur les Ecosystèmes



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UNDP. Under the supervision of the Team Leader of the Economic Transformation and Sustainable Development Programme (TEDD), the project management unit will consist of: a project manager, an administrative and financial assistant, a monitoring and evaluation officer and a driver.

This light Unit team will be completed by three (3) monitors from ANAG on the ground. The management unit will work in close collaboration with ANAG and MPAEM deconcentrated services based in Upper and Middle Guinea regions.

The Field Unit is responsible for making operational management decisions. It provides operational leadership for the project, implements activities in accordance with the approved work plan, monitors progress and takes management actions to address specific risks. It ensures that allocated resources are used in a rational manner to achieve project results.

Reporting and audit requirement

UNDP will produce a quarterly report to facilitate project monitoring and technical reviews. A final report will be produced at the end of the Project and submitted to the Government of Japan.

Project implementation and management will be guided by UNDP Programme and Operations Policy and Procedures (POPP). Project financial management will be cover by UNDP audit policy.



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RESULTS FRAMEWORK

VI.

| EXPECTED OUTPUTS | OUTPUT INDICATORS | DATA | BASELINE | LINE | | TARGETS | | DATA COLLECTION |
|---|---|---------------------------------|----------|------|--------|---------|--------|--|
| | | SOURCE | Value | Year | 2020 | 2021 | 2022 | METHODS & RISKS |
| Output 1 The Guinean National | I.I Number of communities | List of equipment 0 transferred | 0 | | | | | |
| Agency for Aquaculture (ANAG) and its | which adopt good practice of fish farming in Moyenne and Haute Guinea region. | Training reports | | 2019 | 15 | 30 | 35 | Sites visits and Direct Observation |
| strongthonod tooling and | | Mission reports | | | | | | |
| operational capacities to provide better technical | | | 0 | | | | | Field visit report |
| support and monnoring of fish farmers | 1.2 Number of monitoring missions | Training reports | | 2019 | 80 | 80 | 80 | Meeting Notes |
| Gender marker 1 | | Mission reports | | | | | | |
| | 2.1 Number of fish farming sites built or upgraded | Project Activity Report | - 0 | 2019 | 20 | 35 | 35 | Sites visits and Direct Observations |
| Output 2 35 fish farming sites (5 for | 2.2 Areas (m²) of developed sites | Project Activity Report | - 0 | 2019 | 11,600 | 20,300 | 20,300 | Sites visits and Direct Observations |
| each prefecture) are developed and stocked with fingerlings | 2.3 Nbr. of Persons engaged in fish farming | Project Activity Report | -0 | 2019 | 200 | 875 | 1,125 | Training report Lack of access, unavailability/mobility of |
| Gender marker 2 | 2.4 Yield / quantities (kg) of fish caught year per site | Baseline Study Report | 150 | 2019 | 900 | 1,085 | 1,935 | Deneficiaries Lack of access, unavailability/mobility of beneficiaries |
| Output 3 – Availability of fish in the | 3.1 Number of women engaged in marketing the produced fish | Project Activity Report | 175 | 2019 | 400 | 700 | 1,000 | Lack of access, unavailability/mobility of beneficiaries |
| local market is increased | 3.2 Quantity Kg of fish sold on the market | Project Activity Report | 4,000 | 2019 | 7,500 | 15,000 | 22,000 | Disponible of fish / Questionnaire/Interview |
| Gender marker 2 | 3.3 Number of women engaged in processing techniques | Project Activity Report | 85 | 2019 | 200 | 350 | 200 | Questionnaire/Interview |





| | | | T |
|--|--|---|---|
| Lack of access, unavailability/mobility of beneficiaries | Press review report | Press review report | Project Reports Monitoring reports, Evaluation Report |
| | 20 | 0.5 | 05 |
| | 15 | 05 | 02 |
| | 15 | 05 | 02 |
| | 2019 | 2019 | 2019 |
| | 0 | 0 | 0 |
| | Project Activity Report | Project Activity 0 Report | Project Activity Report |
| | 4.1 Number of press articles on the project | 4.2 Number of TV / radio broadcasts on the project | 4.3 Number of monitoring missions carried out |
| | | Communication, Monitoring 4.2 Number of TV / radio and evaluation broadcasts on the project | |

MONITORING AND EVALUATION

VIII.

Project activities will be reviewed on the quarterly basis by the technical committee including ANAG, UNDP, fish farming representatives and donor representatives. This technical committee will play an operational and monitoring role including field visits, quarterly review meeting, and quality insurance.

A Project steering committee, including all stakeholders, will be set up to ensure strategic and decision-making function. The steering committee meetings will be regularly organized once a year and exceptionally based on project needs.

An independent evaluation will be conducted at the end of project.

In accordance with UNDP's programming policies and procedures, the project will be monitored through the following monitoring and evaluation plans:

Monitoring Plan

| M&E Activities Objective Period Period Planned actions Potential partners Prepare project implementation Collect baseline data from existing sites and establish implementation At the beginning of the project: October 2019 Identify the 2 og advaculture sites to be supported by the project: October 2019 ANAG Inception Workshop of the project Inform stakeholders of inform stakeholders of project of different actors November 2019 November 2019 ANAG Joint missions (ANAG and UNDP) to monitor the project Appreciate the level of implementation of the project November 2019 In the event of possible obstacles, take the necessary activities and identify potential difficulties. Biannual In the event of possible obstacles, take the necessary implementation of the project difficulties. ANAG Technical Committee Review project progress toward results. Review project progress toward decision points to the steering of the steering of the project committee In the event of possible obstacles; to the steering of the project committee ANAG | | | | | | |
|---|---|---|---|---|---------------------------------|--------|
| Project baseline data from existing sites and establish baselines of indicators Workshop of different actors sions (ANAG) In Committee Collect baseline data from existing sites and establish baselines of indicators Collect baseline data from project: October 2019 project in Middle Guinean Region Workshop with relevant stakeholders of project November 2019 November 2019 November 2019 November 2019 At the beginning of the project in Middle Guinean Region Workshop with relevant stakeholders of different actors of different actors Sions (ANAG) Appreciate the level of implementation of the project in midentify potential difficulties. I Committee Review project progress toward catched by the project in Middle Guinean Region Workshop with relevant stakeholders of state institutions, CSO, SNU, donor representatives, etc) to officially launch the project implementation of the proj | M&E Activities | Objective | Period | Planned actions | Potential partners | Costs |
| Inform stakeholders of project of different actors sions (ANAG) Appreciate the level of implementation of difficulties. I Committee I Workshop with relevant stakeholders (state institutions, CSO, SNU, donor representatives, etc) Appreciate the level of implementation of the project activities and identify potential difficulties. I Committee I Workshop with relevant stakeholders (state institutions, CSO, SNU, donor representatives, etc) Appreciate the level of implementation of the project activities and identify potential difficulties. I Committee Review project progress toward Quarterly decision points to the steering results. | Prepare project implementation | Collect baseline data from existing sites and establish baselines of indicators | At the beginning of the project: October 2019 | Identify the 20 aquaculture sites to be supported by the project in Middle Guinean Region | ANAG UNDP | 30 000 |
| sions (ANAG Appreciate the level of implementation of the project activities and identify potential difficulties. I Committee Review project progress toward results. | Inception Workshop of the project | Inform stakeholders of project objectives and responsibilities of different actors | November 2019 | Workshop with relevant stakeholders (state institutions, CSO, SNU, donor representatives, etc) to officially launch the project | ANAG UNDP DONORS | 10 000 |
| Committee Review project progress toward Review project progress toward Quarterly decision points to the steering committee | Joint missions (ANAG and UNDP) to monitor the implementation of the project | Appreciate the level of implementation of the project activities and identify potential difficulties. | Biannual | In the event of possible obstacles, take the necessary measures to accelerate the implementation of the project | ANAG UNDP MPAEM DONORS | 30 000 |
| | Technical Committee Meetings | Review project progress toward results. | Quarterly | If necessary, propose decision points to the steering committee | ANAG UNDP MPAEM | 15 000 |





| 20 000 | | | |
|--|---|--|--|
| ANAG, UNDP MPAEM, DONORS Other partners, Communities | ANAG | ANAG UNDP | ANAG UNDP |
| Make strategic decisions required | Risks are identified by project management and actions are taken to manage risk. The risk log is actively maintained to keep track of identified risks and actions taken. | Relevant lessons are captured by the project team and used to inform management decisions. | Areas of strength and weakness will be reviewed by project management and used to inform decisions to improve project performance. |
| April 2019 Nov 2019 March 2020 | Quarterly | At least annually | One design assessment at the beginning and one closure assessment at the end. |
| Make strategic monitoring of the project. | Identify specific risks that may threaten achievement of intended results. Identify and monitor risk management actions using a risk log. This includes monitoring measures and plans that may have been required as per UNDP's Social and Environmental Standards. Audits will be conducted in accordance with UNDP's audit policy to manage financial risk. | Knowledge, good practices and lessons will be captured regularly, as well as actively sourced from other projects and partners and integrated back into the project. | The quality of the project will be assessed against UNDP's quality standards to identify project strengths and weaknesses and to inform management decision making to improve the project. |
| Steering Committee Meetings | Risk tracking and management | Lessons Learned | Annual Project Quality Assurance |

| 00 | 00 |
|--|---|
| 20 000 | 30 000 |
| ANAG UNDP | Independent |
| Field Missions, review of project milestones and consultations with relevant stakeholders | Field missions, review of project targets and consultations with relevant stakeholders |
| Biannually, and at the end of the project (final report) | At the End of the Project |
| A progress report will be presented to the Project Board and key stakeholders, consisting of progress data showing the results achieved against pre-defined targets at the output level. | A final Evaluation will be carried out at the end of the project to assess the project outcomes against the planned objectives. Challenges, lessons learned and recommendation will be subject to a particular focus. |
| Project Report | Final Evaluation |





DETAILED BUDGET AND MULTI-YEAR WORK PLAN

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| | Year 3 | Second | | | | | 4,593 | | | | | | | 4,593 | | | |
|--|---------------------|---------------------|---|-----------------------------------|-----------------------|-------------------------------|-------------------------|--|---------------------------|--|--------------------|------------------------|---|----------------|---|---|---|
| | Ye | First | | | | | 4,593 | | | | | | | 4,593 | | | |
| | Year 2 | Second | 30,000 | | | | 4,593 | | | | 5,000 | | | 39,593 | | | |
| inea Regions | Yes | First | 30,000 | | | | 4,593 | | | | | | | 34,593 | | 141,667 | 10,000 |
| (Middle) Gu | Year 1 | Second | 30,000 | | | | 4,593 | | | 15,000 | 5,000 | | 10,000 | 64,593 | | 141,667 | |
| d Moyenne | Yes | First | 30,000 | | 0 | 21,000 | 4,593 | 16,000 | 10,000 | | | 5,000 | 10,000 | 96,593 | | 141,667 | 10,000 |
| te (Upper) an | TFD | funding | 120,000 | 0 | 0 | 21,000 | 27,560 | 16,000 | 10,000 | 15,000 | 10,000 | 5,000 | 20,000 | 244,560 | 0 | 425,000 | 20,000 |
| culture in Hau | | Budget | 148,000 | 45,000 | 3,600 | 42,000 | 45,360 | 26,500 | 20,000 | 25,000 | 30,000 | 5,000 | 140,000 | 530,460 | 000,000 | 775,000 | 60,000 |
| Project title: Support for the Development of Aquaculture in Haute (Upper) and Moyenne (Middle) Guinea Regions | | Budget description | Expert for technical assistance | Vehicle 4x4 for ANAG supervision | Vehicle running costs | 21 motorbikes | Motorbike running costs | Kits computers and printers | Fingerling transport kits | kits for analyzing physicochemical parameters of water | Didactic materials | Topographic tool kits | Training workshops for ANAG technical staff | Total output 1 | Travel and services | Materials & Goods, Services | Materials & Goods |
| Project title: Suppor | DI ANIMIS A CHIMING | FLAINNED ACTIVITIES | Coaching and technical assistance | | | | | Provide ANAG with logistic and technical equipment | | | | Training workshops and | monitoring of return to work plan | | Conduct feasibility and baseline studies in 2 regions | Support the realization of community and family infrastructures of fish farming | Strengthen 3 fingerlings production units |
| | EXPECTED | OUTPUTS | OUTPUT 1: The Guinean National Agency | for Aquaculture (ANAG) and its | decentralized | services have strengthened | technical and | operational capacities to | provide better | and monitoring of fish farmers | | | | | OUTPUT 2: 35 fish farming sites are developed | | |



| EXPECTED | DI ANNIEN A CHEMINA | | | TFD | Yes | Year 1 | Yea | Year 2 | Yes | Year 3 |
|---|--|-----------------------------|-----------|---------|---------|---------|---------|--------|--------|--------|
| OUTPUTS | TEANNED ACTIVITIES | Buaget description | Budget | funding | First | Second | First | Second | First | Second |
| | Support stock taking and production cycle management | Materials & Goods, Services | 80,000 | 30,000 | 10,000 | | 10,000 | | 10,000 | |
| | Hormones for artificial reproduction | Materials & Goods | 15,000 | 5,000 | | 2,500 | | 2,500 | | |
| | Training sessions for fish farmers | Workshop | 000,09 | 20,000 | | 5,000 | 2,000 | 5,000 | 5,000 | |
| | Monitoring and on-site coaching | Travel and services | 50,000 | 20,000 | 2,000 | 3,000 | 3,000 | 4,000 | 3,000 | 2000 |
| | 2 Vehicles for project field team and transports of fingerlings | Transportation equipment | 90,000 | 45,000 | 45,000 | | | | | |
| | Vehicle running costs | Vehicle running costs | 46,800 | 17,500 | | 3,500 | 3,500 | 3,500 | 3,500 | 3,500 |
| | Vehicle drivers | Service contracts | 43,200 | 37,200 | 6,200 | 6,200 | 6,200 | 6,200 | 6,200 | 6,200 |
| | 8 Field animators in fish farming | Service contracts | 144,000 | 95,200 | 15,867 | 15,867 | 15,867 | 15,867 | 15,867 | 15,867 |
| | | Total output 2 | 1,424,000 | 714,900 | 230,733 | 177,733 | 195,233 | 37,067 | 43,567 | 30,567 |
| OUTPUT 3: Availability of fish in the local market is increased | Sensitize producers to organize the fish production cycles according to market demands | Travels & Services | 40,000 | 10,000 | | 5,000 | | 5,000 | | |
| | Support women-led commercialization schemes: provide equipment support for both transformation and commercialization | Furniture and equipment | 150,000 | 75,000 | 12,500 | 12,500 | 12,500 | 12,500 | 12,500 | 12,500 |
| | Monitor the fishing calendar to ensure the gathering of production and commercialization data. | Travels & Services | 40,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| V | Total output 3 | Total output 3 | 230,000 | 85,000 | 12,500 | 17,500 | 12,500 | 17,500 | 12,500 | 12,500 |





| EXPECTED | | | | TFD | Year 1 | ur 1 | Yes | Year 2 | Yes | Year 3 |
|----------------------------------|---|-----------------------------|-----------|-----------|---------|---------|---------|---------|---------|---------|
| OUTPUTS | PLANNED ACTIVITIES | Budget description | Budget | funding | First | Second | First | Second | First | Second |
| Communication, Monitoring and | Communication and visibility strategy | Services | 50,000 | 35,000 | 10,000 | 3,750 | 3,750 | 3,750 | 3,750 | 10,000 |
| evaluation | Inception workshops | workshop | 20,000 | 10,000 | 10,000 | | | | | |
| | Field monitoring missions | Travel | 45,000 | 30,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 |
| | Final project evaluation | International Consultant | 30,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Technical and steering committees review meetings | Meetings | 45,000 | 35,000 | 5,833 | 5,833 | 5,833 | 5,833 | 5,833 | 5,833 |
| | Project monitoring, including headquarter | Service contract | 60,000 | 20,000 | | 10,000 | | 5,000 | | 5,000 |
| | Total 4 | Total 4 | 250,000 | 130,000 | 30,833 | 24,583 | 14,583 | 19,583 | 14,583 | 25,833 |
| Coordination and | Project manager | Staff | 126,000 | 96,000 | 16,000 | 16,000 | 16,000 | 16,000 | 16,000 | 16,000 |
| пападешен | Finance and administrative assistant | Staff | 72,000 | 57,600 | 0,600 | 0,600 | 009'6 | 009'6 | 009'6 | 009'6 |
| | Programme Team leader support | Staff | 150,000 | 25,000 | 4,167 | 4,167 | 4,167 | 4,167 | 4,167 | 4,167 |
| | Office rehabilitation and equipment | Services & Furniture | 45,000 | 15,000 | | 15,000 | | | | |
| | Office furniture and running costs | furniture and running costs | 45,000 | 17,000 | | 5,000 | 5,000 | 5,000 | 2,000 | |
| | Other direct project costs | Other direct project costs | 75,000 | 50,000 | 8,333 | 8,333 | 8,333 | 8,333 | 8,333 | 8,333 |
| | | Total 5 | 513,000 | 260,600 | 38,100 | 58,100 | 43,100 | 43,100 | 40,100 | 38,100 |
| | SUB-TOTAL | | 2,947,460 | 1,435,060 | 408,760 | 342,510 | 300,010 | 156,843 | 115,343 | 111,593 |
| | GMS (8%) | | 188,265 | 114,805 | 32,701 | 27,401 | 24,001 | 12,547 | 9,227 | 8,927 |
| | TOTAL BUDGET | | 3,135,725 | 1,549,865 | 441,461 | 369,911 | 324,011 | 166,391 | 124,571 | 120,521 |





IX. PROJECT MANAGEMENT STRUCTURE

To ensure national ownership and overall coherence with other UNDP interventions, the project will be implemented according to National Implementation Modality (NIM) with UNDP support.

The Project will be implemented under the responsibility of the Steering Committee which will be set up for this purpose. The steering committee is a strategic and decision-making body.

The Steering Committee will be responsible for:

- Adopting annual project work plans and making strategic decisions for their implementation;
- Reviewing the activities carried out against the desired strategic outcomes and providing necessary directions/reorientations;
- Ensuring coherence of actions implemented with sectoral policies and programs, as well as national and local priorities;
- Stimulating and supporting the coordination between all the actors in the field, for better synergy and complementarity between the interventions;
- Formulating specific requests to the Government, in the framework of its participation and support to the project, and ensuring its follow-up;
- Undertaking advocacy actions, especially for mobilizing resources for the project.

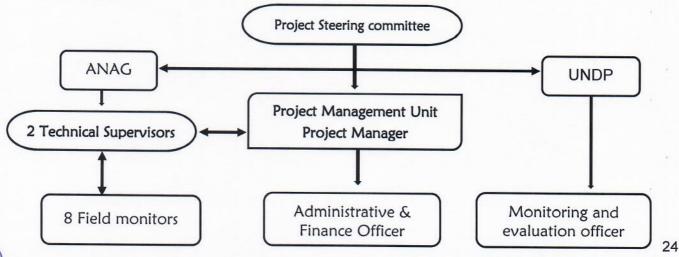
The Project Steering Committee members will include:

- A representative of the Ministry of Fisheries, Aquaculture and Maritime Economy (MPAEM), Executive;
- A representative of the National Agency of Aquaculture of Guinea (ANAG);
- A representative of the Embassy of Federation of Russia;
- A representative of the Embassy of Japan;
- A representative of Japan International Cooperation Agency (JICA)
- A representative UNDP;
- A representative FAO;
- A Representative of the 3 Governorates of Kankan, Mamou, and Labe;
- Three representatives of the fish farmers.

The Steering Committee will meet twice a year for the project duration of three years and, extraordinary if necessary, convened by the Executive. The Executive or two-thirds of the members may request a special session on specific topics.

The Project Management Unit will serve as the Secretariat of the Steering Committee and, as such, ensures the preparation of its meetings (invitations, documentation, etc.), the reporting, the follow-up of recommendations and the preparation of briefing notes for the Executive.

The Steering Committee deliberates if at least two-thirds of the members are present. The costs of steering committee meetings are supported by the project budget. The Chair of the Steering Committee may invite any other relevant person (based on his/her expertise on the issues on the agenda) to participate in the sessions of the Committee.





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The Project Management Unit is responsible for making operational management decisions. It provides operational leadership for the project, implements activities in accordance with the approved work plan, monitors progress and takes management actions to address specific risks. It ensures that allocated resources are used in a rational manner to achieve project results.



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SUMMARY BUDGET

| EXPECTED OUTPUTS | Total Budget (\$ USD) | TFD Budget ((\$ USD)) | JAPAN (\$ USD) | (\$ USD) | Government of Guinea (\$ USD) |
|---|--------------------------|-----------------------|----------------|----------|-------------------------------|
| OUTPUT 1: The Guinean National Agency for Aquaculture (ANAG) and its decentralized services have strengthened technical and operational capacities to provide better technical support and monitoring of fish farmers | 530,460 | 244,560 | 202,700 | 15,200 | 68,000 |
| OUTPUT 2: 35 fish farming sites are developed and stocked with fingerlings. | 1,424,000 | 714,900 | 401,440 | 191,180 | 116,480 |
| OUTPUT 3: Availability of fish in the local market is increased | 230,000 | 85,000 | 80,000 | 20,000 | 45,000 |
| Communication, Monitoring and Evaluation | 250,000 | 130,000 | 90,000 | 30,000 | 0 |
| Coordination and Management | 513,000 | 260,600 | 152,400 | 85,000 | 15,000 |
| SUB-TOTAL | 2,947,460 | 1,435,060 | 926,540 | 341,380 | 244,480 |
| GMS 8% | 188,265 | 114,805 | 73,460 | 0 | 0 |
| TOTAL BUDGET | 3,135,725 | 1,549,865 | 1,000,000 | 341,380 | 244,480 |
| % | 100% | 49% | 32% | 11% | 8% |



X. LEGAL CONTEXT AND RISK MANAGEMENT

LEGAL CONTEXT STANDARD CLAUSES

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of Guinea and UNDP, signed on February 13th, 1975. All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner."

This project will be implemented by the ANAG ("Implementing Partner") in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

XI. RISK MANAGEMENT STANDARD CLAUSES

Option a. Government Entity (NIM)

- 1. Consistent with the Article III of the SBAA, the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP's property in the Implementing Partner's custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:
 - a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
 - b) assume all risks and liabilities related to the Implementing Partner's security, and the full implementation of the security plan.
- 2. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner's obligations under this Project Document.
- 3. The Implementing Partner agrees to undertake all reasonable efforts to ensure that no UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml.
- 4. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (http://www.undp.org/ses) and related Accountability Mechanism (http://www.undp.org/secu-srm).
- 5. The Implementing Partner shall: (a) conduct project and program-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or program to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.
- All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any
 programme or project-related commitments or compliance with the UNDP Social and Environmental
 Standards. This includes providing access to project sites, relevant personnel, information, and documentation.
- 7. The Implementing Partner will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, responsible parties, subcontractors and sub-recipients in implementing the project or using UNDP funds. The Implementing Partner will ensure that its financial management, anti-



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corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.

- 8. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to the Implementing Partner: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. The Implementing Partner agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.
- 9. In the event that an investigation is required, UNDP has the obligation to conduct investigations relating to any aspect of UNDP projects and programmes. The Implementing Partner shall provide its full cooperation, including making available personnel, relevant documentation, and granting access to the Implementing Partner's (and its consultants', responsible parties', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with the Implementing Partner to find a solution.
- 10. The signatories to this Project Document will promptly inform one another in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

Where the Implementing Partner becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, the Implementing Partner will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). The Implementing Partner shall provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

11. Choose one of the three following options:

Option 1: UNDP shall be entitled to a refund from the Implementing Partner of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the Implementing Partner under this or any other agreement. Recovery of such amount by UNDP shall not diminish or curtail the Implementing Partner's obligations under this Project Document.

<u>Note</u>: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

- 12. Each contract issued by the Implementing Partner in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from the Implementing Partner shall cooperate with any and all investigations and post-payment audits.
- 13. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.
- 14. The Implementing Partner shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to each responsible party, subcontractor and sub-recipient and that all the clauses under this section entitled "Risk Management Standard Clauses" are included, *mutatis mutandis*, in all sub-contracts or sub-agreements entered into further to this Project Document.



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