Country: Guinea

NATIONAL RICE INVESTMENT ACTION PLAN(NRIAP)

Strategic priorities, aligns with National Rice Development Strategy (NRDS), and attract investments

April 2026

Table of Content

List of Tables

Acronyms and Abbreviations

ACA	Agricultural Marketing Agency
ACORH	Capacity Building of Rice and Palm Oil Sector Organizations
ADRAO	Association for the Development of Rice Cultivation in West Africa
AFD	French Development Agency
AGRA	Alliance for a Green Revolution in Africa
ANPROCA	National Agency for Rural Promotion and Agricultural Advisory Services
APEK	Association for the Economic Promotion of Kindia
ARI	African Rice Initiative
AfDB	African Development Bank
BADAM	Bank for Agricultural and Mining Development
IDB	Islamic Development Bank
BSD	Strategy and Development Bureau
CARD	Coalition for African Rice Development
ECOWAS	Economic Community of West African States
CONEG	National Confederation of Livestock Farmers of Guinea
CIRAD	International Centre for Agricultural Research for Development

CRG	Rural Credit of Guinea
RVC	Rice Value Chain
DNA	National Directorate of Agriculture
DNGR	National Directorate of Rural Engineering
DNPR	National Directorate of Rural Tracks/Roads
DPDRE	Prefectural Directorate for Rural Development and Environment
PRSP	Poverty Reduction Strategy Paper
DYNAFIV	Project for the Revitalization of Food Crop Sectors
ECOWAP	ECOWAS Common Agricultural Policy
FAO	Food and Agriculture Organization of the United Nations
IFAD	International Fund for Agricultural Development
GRET	Research, Study and Technology Group
MFI	Microfinance Institution
IRAG	Agronomic Research Institute of Guinea
LPDA	Agricultural Development Policy Letter
LPDE	Livestock Development Policy Letter
MAE	Ministry of Agriculture and Livestock
MGE	Guinean Entrepreneur's House
NEPAD	New Partnership for Africa's Development
Nerica	New Rice for Africa
SDG	Sustainable Development Goals
PACV	Programme of Support to Rural Communities
CAADP	Comprehensive Africa Agriculture Development Programme
PADER-HG	Rural Development Project for Upper Guinea
PASAL	Food Security Support Project
PAPR	Rice Plain Development Plan
PDRI-GM	Project for the Development of Irrigated Rice Cultivation in Maritime Guinea
PDRS-II	Project for the Development of Rice Cultivation in Siguiri (2nd phase)
PNIR	National Programme of Rural Infrastructure
PNDA	National Agricultural Development Policy
PNSA	National Agricultural Services Project
PSSA	Special Programme for Food Security
TFP	Technical and Financial Partners
RGTA	Guinean Network for Animal Traction
MIS	Market Information System
SARA	Support Structure for Networks of Male and Female Farmers
SCAC	Cooperation and Cultural Action Service (French Embassy)
SNSA	National Food Security Strategy
UBM	Boora Malé Union

Executive Summary

Increasing national rice production is a strategic challenge for the Guinean Government in order to ensure the country's rice self-sufficiency. To this end, the major challenges that the National Rice Investment Action Plan (NRIAP) must necessarily address include, among others, access to factors of production, adoption of technological packages, mobilization of a qualified workforce, increase and intensification of national rice production, land tenure security of farms, development of action research and extension services, and adaptation to climate change.

Guinean agriculture has significant assets that offer many possibilities for accelerating growth and creating sustainable jobs. This potential offers the capacity both to ensure food self-sufficiency for the population, generate income, and pave the way for profitable, high value-added investments.

The overall objective of the NRIAP is to ensure the country's rice self-sufficiency in the medium term and to export to sub-regional and international markets by 2035. To give shape to this vision aligned with the Simandou 2040 Programme, the plan sets itself the objective of rice self-sufficiency by 2035 with a production level of 5 million tonnes of paddy. This surplus will generate in 2035 a volume of nearly 1,500,000 tonnes of net rice.

With an overall cost of approximately $1.49 billion, financing of the plan will be provided by the State, technical and financial partners, NGOs and development associations, grassroots communities and the private sector. Its governance will be ensured by an Agency that will be created for this purpose to ensure the coordination of the development of the entire rice value chain.

This action plan, therefore, constitutes the reference framework for all public interventions in support of the development of the rice sector. Its development followed a participatory approach, involving all stakeholders concerned (Administration, NGOs, professional organisations, civil society organisations, private operators, technical and financial partners) so as to arrive at a shared vision of strategic orientations, priority areas of intervention, and exit strategies that will be prioritised in the coming years.

The implementation of the NRIAP requires a paradigm shift favouring the full involvement of the private sector and a refocusing of the State's role. Indeed, it is expected that:

- The State focuses on its sovereign role by supporting the implementation of structuring infrastructure, capacity building, access to financing, regulation and control;
- The private sector is fully involved in the implementation of the plan in all links of the sector;
- The needs of producers as well as consumers are met through a demand-based approach.

1.0 Introduction

1.1 Current state of the rice sector

Rice cultivation is at the centre of Guinea's agricultural development strategy due to the importance of this crop in the country. Indeed, rice cultivation occupies 80% of farms and 67% of cultivated areas. It covers 65% of cereal needs. It contributes 23% of the GDP of the primary sector, 11% of imports and 6% of national GDP.

According to the National Agency for Agricultural Statistics (ANASA), rice production in 2023 amounts to 1,644,670 tonnes of paddy, and per capita consumption is approximately 120 kg per year (ANASA 2024). The development policies and strategies for this cereal rest on three major challenges: food security, the fight against poverty in rural areas, and the balance of the country's trade balance. Despite the State's and the private sector's investment efforts, these challenges remain relevant.

Problem statement

Food security constitutes a major challenge for many African countries, a large portion of which suffer from poverty, undernourishment and malnutrition. The 2008 global food crisis, which resulted in the so-called hunger riots, highlighted the fragility and difficulty of many African countries in meeting the food needs of their populations.

In this context, increasing national rice production therefore proves to be a strategic challenge for the Government in order to ensure the country's rice self-sufficiency. To this end, the major challenges that rice cultivation must necessarily address include, among others, adaptation to climate change, access to factors of production, adoption of technological packages, mobilization of a qualified workforce, increase and intensification of national rice production, land tenure security of farms, and development of action research and extension services.

1.2 Stakeholder analysis

Implementation rests on a multi-actor ecosystem with clearly defined roles:

- **Public sector (lead and enabler):** The Ministry of Agriculture owns the NRIAP and will steer delivery through a new agency, the ANDR. IRAG generates climate-adapted technologies ; ANPROCA-FE handles extension, specialised technical services, and local authorities support execution. Their alignment is with food self-sufficiency, import reduction, and rural economic development.

- **Producers and farmer organizations (delivery base):** Smallholder family farmers form the core of the value chain. Cooperatives and farmer associations are the channel for structuring, training, input access, and credit — making them the critical aggregation layer for any project at scale.
- **Private sector (co-investor and operator):** Input suppliers, agro-industrial processors, and service providers (mechanization, irrigation) drive intensification and value addition. Rice traders are central to supply but hold interests that can tension with the self-sufficiency agenda — a relevant consideration in market-shaping investments.

- **Technical and financial partners :** FAO, World Bank, AfDB, IFAD, JICA, CIRAD, and NGOs already finance modernization, irrigation, and training, providing co-financing and alignment opportunities.

- **Consumers :** Urban and rural populations depend on rice as a staple; demand is anchored on availability, affordability, and quality.

Relevant Convergence Points:

Public institutions, producers, and TFPs share aligned interests around productivity, food security, and resilience. The main tension to manage sits between import-dependent traders and the self-sufficiency objective.

Justification for increased investment in rice value chains

In Guinea, rice constitutes the staple food of the population. Its production experienced a significant increase over the period from 2008 to 2018, rising from 1,465,700 tonnes in 2017/2018 to 2,197,000 tonnes of paddy in 2017/2018 (Cadre Harmonisé, March 2023). This production fell back to 1,444,670 tonnes of paddy in 2023/2024, equivalent to 939,036 tonnes of net rice.

These figures show that rice production still cannot meet the population's consumption needs. The deficit is made up by massive imports, which reached 604,000 tonnes in 2023, i.e., one-third of national needs.

Increasing national rice production, therefore, proves to be a strategic challenge for the Government in order to ensure the country's rice self-sufficiency, which sufficiently justifies investments in this sector.

2.0 Vision, Goal, and Objectives

2.0 Vision

Guinea's vision for the rice sector is **"*to ensure the country's rice self-sufficiency in the medium term and to export to sub-regional and international markets in the long term.*"**
This vision reflects an environment in which rice farmers and other actors in the sector contribute to the improvement of rice productivity, but also to the promotion of processing for quality rice that is competitive on the market.
In short, the framework underpinning the NRIAP vision is oriented towards "a goal of sustainable development, food security and a drastic reduction in the deficit of Guinea's agricultural trade balance."

2.2 Goals and Objectives

The overall objective of the action plan is to "contribute to a sustained and lasting increase in rice productivity to ensure food self-sufficiency and absorb the rice trade balance deficit." Specifically, it will involve the following objectives:

- SO1: Improve the organisational framework;
- SO2: Sustainably increase rice productivity;
- SO3: Improve processing, market access, and the competitiveness of local rice.

3.0. Action Plan

The Action Plan outlines the priority investments Guinea will pursue to accelerate the transformation of the rice sector over the 2025–2035 period.

Action 1: Improving the Institutional Framework

Guinea's rice sector brings together a wide range of public and private actors — government services, producers, processors, traders, transporters, technical services, NGOs, projects, and TFPs — but without a coordinating architecture, synergy, complementarity, and resource pooling have been difficult to achieve. The NRIAP addresses this by establishing a three-tier governance structure, complemented by support for sector-wide self-organisation.

1.1. National Agency for Rice Cultivation Development (ANDR)
A new Autonomous Public Establishment (EPA) with administrative and financial autonomy, created to implement the NRIAP. The ANDR will steer the development and modernisation of the rice value chain, with operational responsibility for coordination, project preparation, fundraising, sector structuring, capacity building, and monitoring and evaluation. This activity will cost a total of $**9,616,662.64**

1.2. Board of Directors (CA-ANDR)

The strategic decision-making body for the ANDR. It sets the agency's organisation and the scope of its work, approves the annual work programme, budget, accounts, and activity reports, and allocates human, material, and financial resources. This activity is estimated to cost **$2,884,998.80**

1.3. National Consultation Framework for the Rice Value Chain (CNC-CVR)

A consultative orientation body led by the National Confederation of Farmer Organizations of Guinea (CNOPG), tasked with facilitating dialogue across actors, capitalising on sector experience, and supporting the ANDR in planning and implementing NRIAP activities. This activity is estimated to cost **$1,442,499.32**

1.4. Regional Consultation Committees (CRC)

The regional anchor of the system, responsible for monitoring NRIAP-related investments and ensuring information flow at sub-national level. Each CRC is chaired by the President of the Regional Chamber of Agriculture, with the Regional Director of the ANDR serving as Secretariat. Members include the rice sector apex organisation, projects, NGOs, DRAE, BT Rural Engineering, and DPAE, designated by order of the Governor. The committee will meet twice a year. This activity is estimated to cost **$1,442,499.32**

1.5. Inter-professional Body for the Rice Sector

Alongside this public governance structure, the NRIAP will support the establishment of a rice sector inter-professional body — a self-organised platform for producers, OPAs, processors, traders, and private operators to align interests, prevent conflicts, and curb unfair competition. This will facilitate synergy and complimentarity with the several actor categories involved in the NRIAP implementation. This is estimated to cost **$3,846,665.05**

Action 2: Sustainable Productivity Improvement

The objective is to raise rice productivity by improving access to three priority factors of production — agricultural inputs, hydro-agricultural infrastructure, and agricultural equipment — alongside technical support for intensification using high-yielding varieties and cultivation techniques suited to local agro-ecological conditions. Five interventions deliver on this objective.

2.1. Improving Access to Certified Seeds

Quality seeds are central to higher productivity, climate resilience, and meeting processor and consumer requirements. The NRIAP will organise and professionalise the seed sector in line with national and regional seed regulations. IRAG will produce foundation seeds; certified seeds will be produced by professional operators (seed cooperatives, seed companies, and individual producers); and the DNA will handle certification. A total of **51,882 tonnes of certified seeds** will be produced over the plan period.

2.2. Access to Fertilizers

Low fertilizer use is one of the principal constraints on Guinean agriculture, despite evidence that correct application can double or triple rice yields. The NRIAP aims to make market-priced fertilizer accessible to smallholders, supported where possible by credit. Over the plan period, **77,823 tonnes of fertilizer** (NPK and urea) will be supplied to plant **3,112,935 ha** (see Table 3), alongside **186,776,073 litres of herbicide** to address weed control — another major productivity constraint.

2.3. Production Developments and Infrastructure

Plains and lowlands represent Guinea's strongest rice-growing potential, with **715,000 ha** of developable area, but most of this is exposed to seasonal flooding. The NRIAP will prioritise the rehabilitation and partial development of **65,000 ha of plains and 7,000 ha of lowlands**, through:

- protective dykes, drainage and run-off canals to manage flooding;
- plot demarcation, separation embankments, and water-control structures.

Works will follow a contracting-out model, with private companies handling technical studies, impact assessments, and construction. **150 threshing-drying areas** will be built in the plains (one per 500 ha). The DNGR will supervise development works and rural infrastructure.

2.4. Development of Mechanisation
Low mechanisation — with family farmers still reliant on rudimentary tools (daba, machete, knives) — limits production capacity. The NRIAP will modernise rice production in the large plains through two complementary channels: youth-led private mechanised service centres, and direct acquisition of equipment. Planned acquisitions are:

Equipment	Quantity	Notes
Tractors	437	~1 per 300 ha; phased — 219 in Year 1, renewal from Year 4
Combine harvesters	219	~1 per 300 ha
Power tillers	609	Ploughing for the 7,000 ha of developed lowlands
Motor mowers	609	Harvesting for the same area
Motorised threshers	609	Lowland rice

2.5. Research and Dissemination of Technologies
IRAG and international institutions such as Africa Rice generate intensification innovations — high-yielding varieties, technical itineraries, water management, fertilisation — but adoption by Guinean rice farmers remains low, and so does productivity. The NRIAP will partner with IRAG on adaptive research to identify, introduce, and trial local and exotic rice varieties combining high yield, resilience, good organoleptic quality, and suitability for milling, and to develop technical itineraries tailored to each ecology. Dissemination of the resulting technologies will run through ANPROCA-FE and the Agricultural Producer Organisations (OPAs), drawing on their own advisory networks.

Action 3: Improving Post-Harvest Processing and Marketing

This action focuses on improving processing and marketing conditions to deliver quality, competitive local rice. Investments will target three areas: upgrading processing through proven parboiling and husking technologies; constructing mini-rice mills; and improving packaging. These efforts will be supported by the development of rural roads to open up production areas, move harvests to processing zones, and connect producers to markets. Competitiveness depends not only on rice quality but on how the product reaches the market. Appropriate storage facilities and packaging are therefore essential to ensure traceability and strengthen the position of local rice with consumers.

Action 4: Coordination of the NRIAP

This action harmonises interventions, strengthens monitoring and evaluation, and improves accountability across the sector — creating an economic and social environment more conducive to the NRIAP's objectives.

The Ministry of Agriculture is the supervisory institution, with the General Secretariat overseeing execution as it does for all ministry programmes and projects. Six operational components deliver the action:

- **Operationalising the National Rice Observatory of Guinea** to steer sector actions on the basis of reliable data;
- **Equipping the ONR-T and technical structures** with the infrastructure and equipment needed for rice production activities (rolling stock, seed conservation equipment, and the like);
- **Holding regular strategy meetings** across stakeholders;
- **Defining and tracking action plans** to meet sector performance and competitiveness targets. This will also include Sharing information and good practice to build synergy and complementarity between actors;
- **Conducting periodic implementation reviews** of measures under the plan.

4.0. Conclusion

The development of the action plan (2025-2035) reflects the will of the Guinean Government to align sectoral policies and strategies to make rice cultivation one of the levers for achieving the country's food and nutritional security. In this context, the action plan becomes the framework for all interventions aimed at exploiting the potential.

The action plan envisages producing nearly 5 million tonnes of paddy. To this end, the following activities are prioritised:

- Paddy production will be carried out on 693,381 ha, including 72,000 ha of developed plains and lowlands. 621,381 ha will also be planted in rainfed rice on family farms.
- The modernisation and intensification of production systems will also be promoted through the distribution of 92,875 tonnes of seeds. With regard to fertilisers and phytosanitary products, the quantities estimated to achieve the objectives of NRDS2 are 55,737 tonnes of urea, 83,605 tonnes of NPK, and 27,868,000 litres of herbicides.
- As for the improvement of access to agricultural machines and equipment, emphasis will be placed on, on the one hand, access to ownership and, on the other hand, access to services (private service provision). Thus, forty-four (44) mechanised management centres will be set up (i.e. 1 in each major rice production perimeter).
- For access to agricultural equipment and machines, the acquisition of 437 tractors (of which 30% will be repaired), 609 power tillers, 219 combine harvesters, 609 motorized threshers, and 609 motor mowers will be facilitated.
- The paddy production will be improved thanks to the establishment of 100 modern processing units with the possibility of supporting the upgrading to standards of 94% of hullers.
- Finally, the distribution and marketing circuit will be improved through support for the construction of marketing infrastructure, the upgrading of storage infrastructure to standards, and the definition of a Guinea local rice label.

The expected results and impacts of the implementation of the NRIAP is strongly linked to a sustained political will on the part of the Government for the mobilization of the necessary human, financial, and material resources.

The success of the action plan also depends on the availability of technical and financial partners to accompany the Government in its implementation. Ownership of the strategy document by actors at various levels, particularly rice farmers and territorial communities on the one hand, and the decision of economic operators to invest in the sector on the other hand, are also essential for the realisation of the action plan's objectives.

ANNEX

Annex 1.1: Detailed Budget Table of Investment Areas

No.	Item	Costs per year in USD										
		Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Total
	Action 1: Improvement of the Organizational Framework of the sector	**2,529,182.21**	**1,856,015.88**	**1,856,015.88**	**1,856,015.88**	**1,856,015.88**	**1,856,015.88**	**1,856,015.88**	**1,856,015.88**	**1,856,015.88**	**1,856,015.88**	**19,233,325.13**
	Sub-action 1.1 Create the National Agency for Rice Cultivation Development	**1,134,766.18**	**942,432.94**	**942,432.94**	**942,432.94**	**942,432.94**	**942,432.94**	**942,432.94**	**942,432.94**	**942,432.94**	**942,432.94**	**9,616,662.64**
Activity 1.1.1	Set up the bodies of the National Agency for Rice Cultivation Development	192,333.24	-	-	-	-	-	-	-	-	-	192,333.24
Activity 1.1.2	Strengthen the technical and operational capacities of the bodies of the ANDR	365,433.18	365,433.18	365,433.18	365,433.18	365,433.18	365,433.18	365,433.18	365,433.18	365,433.18	365,433.18	3,654,331.80
Activity 1.1.3	Strengthen the capacities of the ANDR bodies to steer the development and modernization of the rice value chain	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	2,884,998.80

Activity 1.1.4	Strengthen the capacities of the ANDR bodies to coordinate project preparation, fundraising and the structuring of the sector	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	2,884,998.80
	Sub-action 1.2 Board of Directors of the ANDR (CA-ANDR)	**288,499.88**	**288,499.88**	**288,499.88**	**288,499.88**	**288,499.88**	**288,499.88**	**288,499.88**	**288,499.88**	**288,499.88**	**288,499.88**	**2,884,998.80**
Activity 1.2.1	Designate the members of the CA-ANDR	-	-	-	-	-	-	-	-	-	-	-
Activity 1.2.2	Support the organization of CA-ANDR meetings	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	2,884,998.80
	Sub-action 1.3 Set up the National Consultation Framework	**274,074.86**	**129,824.94**	**129,824.94**	**129,824.94**	**129,824.94**	**129,824.94**	**129,824.94**	**129,824.94**	**129,824.94**	**129,824.94**	**1,442,499.32**
Activity 1.3.1	Support the establishment of the national consultation framework	144,249.92	-	-	-	-	-	-	-	-	-	144,249.92
Activity 1.3.2	Strengthen the technical and operational capacities of the national consultation framework	129,824.94	129,824.94	129,824.94	129,824.94	129,824.94	129,824.94	129,824.94	129,824.94	129,824.94	129,824.94	1,298,249.40

	Sub-action 1.4 Set up the Regional Consultation Framework	**274,074.86**	**129,824.94**	**129,824.94**	**129,824.94**	**129,824.94**	**129,824.94**	**129,824.94**	**129,824.94**	**129,824.94**	**129,824.94**	**1,442,499.32**
Activity 1.4.1	Support the establishment of the regional consultation framework	144,249.92	-	-	-	-	-	-	-	-	-	144,249.92
Activity 1.4.2	Strengthen the technical and operational capacities of the regional consultation framework	129,824.94	129,824.94	129,824.94	129,824.94	129,824.94	129,824.94	129,824.94	129,824.94	129,824.94	129,824.94	1,298,249.40
	Sub-action 1.5 Support the establishment of an inter-professional rice sector body	**557,766.43**	**365,433.18**	**365,433.18**	**365,433.18**	**365,433.18**	**365,433.18**	**365,433.18**	**365,433.18**	**365,433.18**	**365,433.18**	**3,846,665.05**
Activity 1.5.1	Set up an inter-professional rice sector body	192,333.25	-	-	-	-	-	-	-	-	-	192,333.25
Activity 1.5.2	Strengthen the technical and operational capacities of the inter-professional rice sector body	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	288,499.88	2,884,998.80
Activity 1.5.3	Support the operationalization of the inter-professional rice sector body	76,933.30	76,933.30	76,933.30	76,933.30	76,933.30	76,933.30	76,933.30	76,933.30	76,933.30	76,933.30	769,333.00

	Action 2: Sustainable improvement of productivity	**54,526,044.52**	**270,188,026.95**	**230,384,857.61**	**209,214,857.46**	**187,489,024.36**	**156,374,024.36**	**48,223,191.24**	**47,742,358.13**	**47,742,358.13**	**43,851,189.94**	**1,295,735,932.70**
	Sub-action 2.1: Improve access to certified seeds	**9,375,855.57**	**13,128,671.11**	**5,046,334.73**	**5,046,334.73**	**5,046,334.73**	**5,046,334.73**	**5,046,334.73**	**5,046,334.73**	**5,046,334.73**	**1,155,166.54**	**58,984,036.33**
Activity 2.1.1	Identify 12 seed varieties to promote according to ecologies	622,586.91	-	-	-	-	-	-	-	-	-	622,586.91
Activity 2.1.2	Multiply 12 resilient seed varieties to promote according to ecologies	-	1,106,821.17	1,106,821.17	1,106,821.17	1,106,821.17	1,106,821.17	1,106,821.17	1,106,821.17	1,106,821.17	1,106,821.17	9,961,390.53
Activity 2.1.3	Identify seed cooperatives for the multiplication of seeds to promote	622,586.91	-	-	-	-	-	-	-	-	-	622,586.91
Activity 2.1.4	Support seed cooperatives for the multiplication of seeds to promote	-	3,891,168.19	3,891,168.19	3,891,168.19	3,891,168.19	3,891,168.19	3,891,168.19	3,891,168.19	3,891,168.19	-	31,129,345.52
Activity 2.1.5	Rehabilitate the seed centres of Koba, Kilissi, Bordo, Sérédou, and Guéckédou	7,782,336.38	7,782,336.38	-	-	-	-	-	-	-	-	15,564,672.76
Activity 2.1.6	Strengthen the technical capacities of producers in the use of seeds	48,345.37	48,345.37	48,345.37	48,345.37	48,345.37	48,345.37	48,345.37	48,345.37	48,345.37	48,345.37	483,453.70

Activity 2.1.7	Define the modalities for the State subsidy of seed prices	-	-	-	-	-	-	-	-	-	-	-
Activity 2.1.8	Adopt regional digital advisory modules on Good Agricultural Practices (training and consultation framework)	200,000.00	200,000.00	-	-	-	-	-	-	-	-	400,000.00
Activity 2.1.9	Adopt regional protocols for seed certification and the release of varieties	100,000.00	100,000.00	-	-	-	-	-	-	-	-	200,000.00
	Sub-action 2.2 Improve access to fertilizers	**4,529,310.70**	**4,529,310.70**	**4,529,310.70**	**4,529,310.70**	**4,529,310.70**	**4,529,310.70**	**4,529,310.70**	**4,529,310.70**	**4,529,310.70**	**4,529,310.70**	**45,293,107.00**
Activity 2.2.1	Set up a coherent and harmonized supply mechanism for producer fertilizers	-	-	-	-	-	-	-	-	-	-	-
Activity 2.2.2	Define the modalities for the State subsidy of fertilizer prices	-	-	-	-	-	-	-	-	-	-	-
Activity 2.2.3	Carry out soil analysis and propose fertilization formulas adapted to each major perimeter	-	-	-	-	-	-	-	-	-	-	-
Activity 2.2.4	Acquire 46,694 tonnes of NPK	2,661,550.00	2,661,550.00	2,661,550.00	2,661,550.00	2,661,550.00	2,661,550.00	2,661,550.00	2,661,550.00	2,661,550.00	2,661,550.00	26,615,500.00

Activity 2.2.5	Acquire 31,129 tonnes of nitrogen fertilizer	1,867,760.70	1,867,760.70	1,867,760.70	1,867,760.70	1,867,760.70	1,867,760.70	1,867,760.70	1,867,760.70	1,867,760.70	1,867,760.70	18,677,607.00
	Sub-action 2.3 Improve access to phytosanitary products	**32,685,812.70**	**32,685,812.70**	**32,685,812.70**	**32,685,812.70**	**32,685,812.70**	**32,685,812.70**	**32,685,812.70**	**32,685,812.70**	**32,685,812.70**	**32,685,812.70**	**326,858,127.00**
Activity 2.3.1	Acquire 15,564,673 litres of total herbicide	9,338,803.70	9,338,803.70	9,338,803.70	9,338,803.70	9,338,803.70	9,338,803.70	9,338,803.70	9,338,803.70	9,338,803.70	9,338,803.70	93,388,037.00
Activity 2.3.2	Acquire 15,564,673 litres of selective herbicide	23,347,009.00	23,347,009.00	23,347,009.00	23,347,009.00	23,347,009.00	23,347,009.00	23,347,009.00	23,347,009.00	23,347,009.00	23,347,009.00	233,470,090.00
	Sub-action 2.4 Production developments and infrastructure	**-**	**137,340,000.00**	**106,100,000.00**	**84,980,000.00**	**63,735,000.00**	**32,620,000.00**	**-**	**-**	**-**	**-**	**424,775,000.00**
Activity 2.4.1	Rehabilitate 32,500 ha of plain	-	68,250,000.00	56,875,000.00	45,500,000.00	34,125,000.00	22,750,000.00	-	-	-	-	227,500,000.00
Activity 2.4.2	Develop 32,500 ha of plain	-	56,875,000.00	40,625,000.00	32,500,000.00	24,375,000.00	8,125,000.00	-	-	-	-	162,500,000.00
Activity 2.4.3	Develop 7,000 ha of lowlands in Forest Guinea	-	9,800,000.00	7,000,000.00	5,600,000.00	4,200,000.00	1,400,000.00	-	-	-	-	28,000,000.00
Activity 2.4.4	Build 150 threshing-drying areas in the plains	-	2,415,000.00	1,600,000.00	1,380,000.00	1,035,000.00	345,000.00	-	-	-	-	6,775,000.00
	Sub-action 2.5: Integrate climate-smart approaches in hydro-agricultural developments	**-**	**75,050,000.00**	**75,050,000.00**	**75,050,000.00**	**75,050,000.00**	**75,050,000.00**	**-**	**-**	**-**	**-**	**375,250,000.00**
Activity 2.5.1	Delineate the basin, map,	-	50,000,000.00	50,000,000.00	50,000,000.00	50,000,000.00	50,000,000.00	-	-	-	-	250,000,000.00

	analyse degradation, and identify production zones (crops, catchment areas)											
Activity 2.5.2	Carry out upstream and downstream actions to reduce erosion through protection works (reforestation, contour lines) and agricultural valorization of lowlands	-	25,000,000.00	25,000,000.00	25,000,000.00	25,000,000.00	25,000,000.00	-	-	-	-	125,000,000.00
Activity 2.5.3	Involve local actors in the diagnosis and implementation to ensure ownership and sustainability	-	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	-	-	-	-	250,000.00
	Sub-action 2.6: Strengthen climate alert systems and sustainable water management	**1,550,000.00**	**1,550,000.00**	**1,550,000.00**	**1,500,000.00**	**1,500,000.00**	**1,500,000.00**	**1,500,000.00**	**1,500,000.00**	**1,500,000.00**	**1,500,000.00**	**15,150,000.00**
Activity 2.6.1	Improve real-time data collection through hydro-meteorological stations, sensors and satellite imagery, integrating	500,000.00	500,000.00	500,000.00	500,000.00	500,000.00	500,000.00	500,000.00	500,000.00	500,000.00	500,000.00	5,000,000.00

	artificial intelligence											
Activity 2.6.2	Ensure that information reaches local populations quickly, particularly the most vulnerable	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	10,000,000.00
Activity 2.6.3	Collaborate among local actors (communities, farmers, businesses) for a balanced sharing of the resource	50,000.00	50,000.00	50,000.00	-	-	-	-	-	-	-	150,000.00
	Sub-action 2.7: Development of mechanization	**3,980,900.00**	**3,980,900.00**	**3,980,900.00**	**3,980,900.00**	**3,980,900.00**	**3,980,900.00**	**3,980,900.00**	**3,980,900.00**	**3,980,900.00**	**3,980,900.00**	**39,809,000.00**
Activity 2.7.1	Acquire 437 tractors	2,187,266.70	2,187,266.70	2,187,266.70	2,187,266.70	2,187,266.70	2,187,266.70	2,187,266.70	2,187,266.70	2,187,266.70	2,187,266.70	21,872,667.00
Activity 2.7.2	Acquire 219 combine harvesters	1,093,633.30	1,093,633.30	1,093,633.30	1,093,633.30	1,093,633.30	1,093,633.30	1,093,633.30	1,093,633.30	1,093,633.30	1,093,633.30	10,936,333.00
Activity 2.7.3	Acquire 609 power tillers	273,913.00	273,913.00	273,913.00	273,913.00	273,913.00	273,913.00	273,913.00	273,913.00	273,913.00	273,913.00	2,739,130.00
Activity 2.7.4	Acquire 609 motor mowers	213,043.50	213,043.50	213,043.50	213,043.50	213,043.50	213,043.50	213,043.50	213,043.50	213,043.50	213,043.50	2,130,435.00
Activity 2.7.5	Acquire 609 motorized threshers	213,043.50	213,043.50	213,043.50	213,043.50	213,043.50	213,043.50	213,043.50	213,043.50	213,043.50	213,043.50	2,130,435.00
Activity 2.7.6	Facilitate the establishment of mechanization service provision enterprises in	-	-	-	-	-	-	-	-	-	-	-

	favour of young people											
	Sub-action 2.8 Research and dissemination of technologies	**2,404,165.55**	**1,923,332.44**	**1,442,499.48**	**1,442,499.33**	**961,666.23**	**961,666.23**	**480,833.11**	**-**	**-**	**-**	**9,616,662.37**
Activity 2.8.1	Develop a partnership with IRAG for the conduct of adaptive research (identification, introduction and experimentation of local and exotic rice varieties)	721,249.66	576,999.73	432,749.80	432,749.80	288,499.87	288,499.87	144,249.93	-	-	-	2,884,998.66
Activity 2.8.2	Promote the System of Rice Intensification (SRI) in lowlands and plains	480,833.11	384,666.49	288,500.02	288,499.87	192,333.24	192,333.24	96,166.62	-	-	-	1,923,332.59
Activity 2.8.3	Strengthen the capacities of IRAG researchers on the most efficient technologies	601,041.39	480,833.11	360,624.83	360,624.83	240,416.56	240,416.56	120,208.28	-	-	-	2,404,165.56
Activity 2.8.4	Strengthen the capacities of ANPROCA-FE agricultural advisors on the most efficient technologies	601,041.39	480,833.11	360,624.83	360,624.83	240,416.56	240,416.56	120,208.28	-	-	-	2,404,165.56
	Action 3: Improvement of post-harvest processing and marketing	**9,666,000.00**	**11,808,502.33**	**14,808,502.33**	**8,740,252.33**	**7,932,000.00**	**2,782,000.00**	**2,782,000.00**	**2,782,000.00**	**2,782,000.00**	**2,782,000.00**	**66,865,256.99**

	Sub-action 3.1: Improve processing	**4,216,000.00**	**5,058,502.33**	**4,858,502.33**	**2,690,252.33**	**1,932,000.00**	**1,932,000.00**	**1,932,000.00**	**1,932,000.00**	**1,932,000.00**	**1,932,000.00**	**28,415,256.99**
Activity 3.1.1	Set up 53 processing units equipped with improved parboilers and de-stoning hullers meeting regional milling quality requirements	-	152,250.00	152,250.00	-	-	-	-	-	-	-	304,500.00
Activity 3.1.2	Build 44 mini-rice mills in the developed perimeters with a processing capacity of 3,000 t/year meeting regional milling quality requirements	-	758,252.33	758,252.33	758,252.33	-	-	-	-	-	-	2,274,756.99
Activity 3.1.3	Build 144 warehouses of 2,000 tonnes of net rice	2,016,000.00	2,016,000.00	2,016,000.00	-	-	-	-	-	-	-	6,048,000.00
Activity 3.1.4	Support the private sector for the construction of a rice packaging plant	2,000,000.00	-	-	-	-	-	-	-	-	-	2,000,000.00
Activity 3.1.5	Facilitate access to 15,120,000 sacks for paddy rice and 9,828,000 stamped sacks for net rice	-	1,932,000.00	1,932,000.00	1,932,000.00	1,932,000.00	1,932,000.00	1,932,000.00	1,932,000.00	1,932,000.00	1,932,000.00	17,388,000.00
Activity 3.1.6	Promote labelled Guinean rice	200,000.00	200,000.00	-	-	-	-	-	-	-	-	400,000.00

	meeting ECOWAS SPS standards and rice classification standards											
	Sub-action 3.2: Opening up of major rice production areas	**5,450,000.00**	**5,450,000.00**	**5,450,000.00**	**5,450,000.00**	**5,450,000.00**	**650,000.00**	**650,000.00**	**650,000.00**	**650,000.00**	**650,000.00**	**30,500,000.00**
Activity 3.2.1	Rehabilitate 3,000 km of rural roads in areas with high rice potential	4,200,000.00	4,200,000.00	4,200,000.00	4,200,000.00	4,200,000.00	-	-	-	-	-	21,000,000.00
Activity 3.2.2	Construct 1,000 linear metres (lm) of crossing structures in marketing areas	600,000.00	600,000.00	600,000.00	600,000.00	600,000.00	-	-	-	-	-	3,000,000.00
Activity 3.2.3	Maintain 1,500 km of rural roads	450,000.00	450,000.00	450,000.00	450,000.00	450,000.00	450,000.00	450,000.00	450,000.00	450,000.00	450,000.00	4,500,000.00
Activity 3.2.4	Maintain 1,000 linear metres (lm) of crossing structures	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00	2,000,000.00
	Sub-action 3.3: Integrate a regional market development strategy	**-**	**450,000.00**	**450,000.00**	**350,000.00**	**-**	**-**	**-**	**-**	**-**	**-**	**1,250,000.00**
Activity 3.3.1	Encourage the adoption of harvesting, drying and storage techniques to reduce losses and improve the rice broken rate, including	-	200,000.00	200,000.00	200,000.00	-	-	-	-	-	-	600,000.00

	packaging to ECOWAS standards											
Activity 3.3.2	Strengthen regional standardization and certification	-	100,000.00	100,000.00	-	-	-	-	-	-	-	200,000.00
Activity 3.3.3	Promote the export of Guinean rice to neighbouring countries	-	150,000.00	150,000.00	150,000.00	-	-	-	-	-	-	450,000.00
	Sub-action 3.4: Set up agricultural risk management mechanisms (insurance instruments – index insurance, AC health insurance, etc.)	**-**	**600,000.00**	**200,000.00**	**-**	**300,000.00**	**-**	**-**	**-**	**-**	**-**	**1,100,000.00**
Activity 3.4.1	Set up insurance instruments (index insurance, health insurance)	-	300,000.00	-	-	300,000.00	-	-	-	-	-	600,000.00
Activity 3.4.2	Promote contract farming	-	200,000.00	200,000.00	-	-	-	-	-	-	-	400,000.00
Activity 3.4.3	Promote Counterpart Funds for inclusive rice enterprises	-	100,000.00	-	-	-	-	-	-	-	-	100,000.00
	Sub-action 3.5: Set up a rice cultivation development fund	**-**	**50,000.00**	**2,050,000.00**	**50,000.00**	**50,000.00**	**-**	**-**	**-**	**-**	**-**	**2,200,000.00**

Activity 3.5.1	Set up a rice cultivation development fund (window)	-	-	2,000,000.00	-	-	-	-	-	-	-	2,000,000.00
Activity 3.5.2	Integrate the ECOWAS regional blended financing platform	-	50,000.00	50,000.00	50,000.00	50,000.00	-	-	-	-	-	200,000.00
	Sub-action 3.6: Provide financial support to sector actors	**-**	**200,000.00**	**1,800,000.00**	**200,000.00**	**200,000.00**	**200,000.00**	**200,000.00**	**200,000.00**	**200,000.00**	**200,000.00**	**3,400,000.00**
Activity 3.6.1	Provide financial and non-financial support (training) to sector actors	-	-	1,600,000.00	-	-	-	-	-	-	-	1,600,000.00
Activity 3.6.2	Support actors in developing a bankable business plan by identifying priorities and necessary resources	-	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00	1,800,000.00
	Action 4: Coordination	**9,777,416.32**	**9,777,416.32**	**9,777,416.32**	**9,777,416.32**	**9,777,416.32**	**9,777,416.32**	**9,777,416.32**	**9,777,416.32**	**9,777,416.32**	**9,777,416.32**	**97,774,163.20**
	Sub-action 4.1: Operationalize the National Rice Observatory to better steer the actions of the sector	**4,563,779.06**	**4,563,779.06**	**4,563,779.06**	**4,563,779.06**	**4,563,779.06**	**4,563,779.06**	**4,563,779.06**	**4,563,779.06**	**4,563,779.06**	**4,563,779.06**	**45,637,790.60**
Activity 4.1.1	Set up and animate a framework for consultation, exchange of	684,566.86	684,566.86	684,566.86	684,566.86	684,566.86	684,566.86	684,566.86	684,566.86	684,566.86	684,566.86	6,845,668.60

	information and sharing of good practices among stakeholders											
Activity 4.1.2	Strengthen the technical and operational capacities of the National Rice Observatory in data collection, monitoring and observation	3,879,212.20	3,879,212.20	3,879,212.20	3,879,212.20	3,879,212.20	3,879,212.20	3,879,212.20	3,879,212.20	3,879,212.20	3,879,212.20	38,792,122.00
	Sub-action 4.2: Organize coordination meetings	**1,140,944.76**	**1,140,944.76**	**1,140,944.76**	**1,140,944.76**	**1,140,944.76**	**1,140,944.76**	**1,140,944.76**	**1,140,944.76**	**1,140,944.76**	**1,140,944.76**	**11,409,447.60**
Activity 4.2.1	Hold quarterly meetings to review the implementation of production, processing and marketing forecasts established by the sector actors	228,188.95	228,188.95	228,188.95	228,188.95	228,188.95	228,188.95	228,188.95	228,188.95	228,188.95	228,188.95	2,281,889.50
Activity 4.2.2	Hold the meetings of the Steering Committee	912,755.81	912,755.81	912,755.81	912,755.81	912,755.81	912,755.81	912,755.81	912,755.81	912,755.81	912,755.81	9,127,558.10
	Sub-action 4.3: Monitoring, evaluation and audit	**2,543,432.81**	**2,543,432.81**	**2,543,432.81**	**2,543,432.81**	**2,543,432.81**	**2,543,432.81**	**2,543,432.81**	**2,543,432.81**	**2,543,432.81**	**2,543,432.81**	**25,434,328.10**
Activity 4.3.1	Set up an external audit system to examine the accounts and expenditure	507,086.56	507,086.56	507,086.56	507,086.56	507,086.56	507,086.56	507,086.56	507,086.56	507,086.56	507,086.56	5,070,865.60

	management practices of the plan											
Activity 4.3.2	Monitor and evaluate the actions of the plan	1,529,259.69	1,529,259.69	1,529,259.69	1,529,259.69	1,529,259.69	1,529,259.69	1,529,259.69	1,529,259.69	1,529,259.69	1,529,259.69	15,292,596.90
Activity 4.3.3	Adopt the ECOWAS key performance indicators (KPIs) for rice monitoring	507,086.56	507,086.56	507,086.56	507,086.56	507,086.56	507,086.56	507,086.56	507,086.56	507,086.56	507,086.56	5,070,865.60
	Sub-action 4.4: Conduct periodic reviews on the implementation of the various measures	**1,529,259.69**	**1,529,259.69**	**1,529,259.69**	**1,529,259.69**	**1,529,259.69**	**1,529,259.69**	**1,529,259.69**	**1,529,259.69**	**1,529,259.69**	**1,529,259.69**	**15,292,596.90**
Activity 4.4.1	Conduct periodic reviews on the implementation of the various measures	1,529,259.69	1,529,259.69	1,529,259.69	1,529,259.69	1,529,259.69	1,529,259.69	1,529,259.69	1,529,259.69	1,529,259.69	1,529,259.69	15,292,596.90
	TOTAL	**76,498,643.05**	**293,629,961.48**	**256,826,792.14**	**229,588,542.99**	**207,054,456.56**	**170,789,456.56**	**62,638,623.44**	**62,157,790.33**	**62,157,790.33**	**58,266,622.14**	**1,479,608,678.02**

Investment Area 2: Seed production Under Irrigation												
ACTIONS	KEY ACTIVITIES	COST (USD)										TOTALS
		Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	
2.1. Site Suitability Assessments	2.1.1. Assess water availability and quality at potential production sites	45,000	-	-	-	-	-	-	-	-	-	45,000
	2.1.2. Evaluate soil suitability and cropwater requirements.	45,000	-	-	-	-	-	-	-	-	-	45,000
											Sub-Total Activity 2.1	90,000
2.2. Irrigation Land Development	2.2.1. Land Levelling	**105,000**	-	-	-	-	-	-	-	-	-	105,000
	2.2.2.Plot demarcation (0.1–0.2 ha seed plots)	105,000	-	-	-	-	-	-	-	-	-	105,000
	2.2.3.Bund Construction and Repair	315,000	-	-	-	-	-	-	-	-	-	315,000
	2.2.4. Irrigation Pipe Installation	1,197,000	-	-	-	-	-	-	-	-	-	1,197,000
											Sub-Total Activity 2.2	**1,722,000**
2.3. Equipment and Material Procurement	2.3.1. Procure inputs to support foundation and certified Seeds production	355,000	535,000	342,500	342,500	-	-	-	-	-	-	1,575,000
	2.3.2. Rice transplanters	15,000	-	-	6,000	-	-	-	-	-	-	21,000
	2.3.3. Mechanised canal desilter	3,000	-	-	1,500	-	-	-	-	-	-	4,500
	2.3.4. Grass cutters	3,750	-	1,750	-	1,250	-	-	-	-	-	6,750
	2.3.5. Dredging pump	1,050	-	350	-	-	-	-	-	-	-	1,400
	2.3.6.Mini rice reaper / combine	90,000	-	-	-	-	-	-	-	-	-	90,000
	2.3.7.Seed-grade threshers	25,000	-	-	8,000	-	-	-	-	-	-	33,000

	2.3.8. Aspirators / winnowers	4,800	-	-	1,200	-	-	-	-	-	-	6,000
	2.3.9.Hermetic bins	15,000	-	-	-	2,500	-	-	-	-	-	17,500
	2.3.10.Stackable crates (bulk)	30,000	30,000	30,000	30,000	30,000	-	-	-	-	-	150,000
	2.3.11.Water Monitoring Systems	60,000	-	-	-	-	-	-	-	-	-	60,000
	2.3.12. Costs of on-site quality Control Setup	200,000	-	-	-	-	-	-	-	-	-	200,000
											Sub-Total Activity 2.3	**2,165,150**
2.4. Training and Capacity Building	2.4.1.Training on Efficient Irrigation Practices and Crop Management for Seed Producers	15,000	15,000	15,000	15,000	15,000	-	-	-	-	-	75,000
	2.4.2. Train 100 seed producers and 20 institutional staff on irrigation management, maintenance, seed quality assurance and climate-smart practices.	30,000	30,000	30,000	30,000	30,000	-	-	-	-	-	150,000
	2.4.2. Establish seed demonstrations and organise field days for seed producers to build their capacity	405,000	405,000	405,000	405,000	405,000	-	-	-	-	-	2,025,000
	2.4.3. Develop seed distribution network to support seed marketing	131,206	106,206	131,206	106,206	131,206	-	-	-	-	-	606,030
											Sub-Total Activity 2.4	**2,856,030**
2.5. Monitoring, Evaluation and Institutional Strengthening	2.5.1. Personnel Costs for provision of Technical support on irrigation system operation and maintenance	20,000	20,000	20,000	20,000	20,000						100,000
	2.5.2.Personnel costs for engagement with WUAs	20,000	20,000	20,000	20,000	20,000						100,000

	2.5.3. Personnel costs for Partnership Management	10,000	10,000	10,000	10,000	10,000						50,000
	2.5.4. Implement best management practices for seed production, including crop monitoring and pest management	30,000										30,000
	2.5.5.Evaluate the effectiveness of irrigation systems and identify areas for improvement	15,000										15,000
											Sub-Total Activity 2.5	**295,000**
TOTAL		3,290,806	1,171,206	1,005,806	995406	664,965	-	-	-	-	-	**7,128,180**

Investment Area 3: Research and Technology Transfer												
ACTIONS	**KEY ACTIVITIES**	**COST ($)**										
		Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	TOTALS
3.1. Develop and purify climate-smart, high-quality rice varieties	3.1.1. Germplasm collection	7,660	-	-	-	-						7,660
	3.1.2. Parent selection & crossing	7,200	-	-	-	-						7,200
	3.1.3. F1 Generation development	11,400	-	-	-	-						11,400
	3.1.4. F2 – F5 Development	4,620	4,650	4,650	-	-						13,920
	3.1.5. Genotyping	-	-	-	10,080	-						10,080

	3.1.6. Field Trials	-	-	54,180	54,180	54,180	54,180					216,720
	3.1.7. Variety Release	-	-	-	-	28,470						28,470
	3.1.8. Field Establishment	5,805	5,805	5,805	5,805	5,805	5,805	5,805	5,805	5,805	5,805	58,050
	3.1.9. Field Management and Maintenance	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	54,000
	3.1.10. Procurement of Equipment and Materials	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	30,000
	3.1 11. Setup of Storage	3,000	3,000	3,000	3,000	3,000	3,00	3,000	3,000	3,000	3,000	30,000
											Sub-Total Activity 3.1	**467,500**
3.2. Develop state-of-the-art t nucleus and breeder seed fields for production and variety maintenance	3.2.1. Site selection and establishment across three institutions	730,950	525,000	-	-	-						1,255,950
	3.2.2 Nucleus and Breeder field Monitoring across all institutional sites	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	250,000
	3.2.3. Breeder Seed Production	20,100	20,100	20,100	20,100	20,100	20,100	20,100	20,100	20,100	20,100	201,000
	3.2.4. Breeder Seed Packaging and Storage	2,550	2,550	2,550	2,550	2,550	2,550	2,550	2,550	2,550	2,550	25,500
											Sub-Total Activity 3.2	**1,732,450**
3.3. Lab Establishment	3.3.1. Rice research lab	120,000	120,000	120,000	-	-						360,000

and Capacity Building	Construction across three sites											
	3.3.2. Procurement of lab equipment	600,000	600,000	600,000	-	-						1,800,000
	3.3.3. Capacity building of laboratory staff	10,000	-	-	-	-						10,000
	Sub-Total Activity 3.3											**2,170,000**
3.4 Varietal Promotion and Training	3.4.1. Training of extension offers	-	-	-	-	-	60,000	-	-	-	-	60,000
	3.4.2. Training of farmers and millers	-	-	-	-	-	105,000	-	-	-	-	105,000
											Sub-Total Activity 3.4	**165,000**
	TOTAL											**4,534,949**

Action 4: Harvesting, Post Harvest and Marketing												
COMPONENT	ACTIVITIES	COST ($)										
		Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	**Total**
4.1. Upgrade of 50 Existing Milling Centres	4.1.1. Conduct assessments of existing milling centres (11 regions) to identify upgrade needs and feasibility	25,000	—	—	—	—						25,000
	4.1.2. Develop detailed upgrade plans including specifications for modern processing equipment	15,000	—	—	—	—						15,000
	4.1.3. Procure required equipment ensuring compliance with Ghana	12,500,000	12,500,000	—	—	—						25,000,000

	Standards and ISO requirements											
	4.1.4. Install procured equipment for upgrade	—	7,500,000	7,500,000	—	—						15,000,000
	4.1.5. Establish monitoring systems	—	—	20,000	—	—						20,000
	4.1.6. Procure and deploy combine harvesters, reapers, and mechanised threshers at milling centre catchment areas	—	2,000,000	2,000,000	—	—						4,000,000
	4.1.7. Equip all upgraded mills with multi-stage paddy cleaners, de-stoners, whiteners, and colour sorters	—	1,000,000	1,000,000	—	—						2,000,000
	Maintenance of Existing Centres		100,000	120,000	150,000	170,000	200,000	250,000	270,000	300,000	320,000	1,880,000
SUBTOTAL 4.1		**12,540,000**	**23,100,000**	**10,640,000**	**150,000**	**170,000**	**200,000**	**250,000**	**270,000**	**300,000**	**320,000**	**47,940,000**
											0	0
4.2. Map and Train 5,000 Farmers, FBO Leaders, Aggregator Staff, Miller Staff and Warehouse Managers	4.2.1. Conduct training needs assessment for target groups	—	5,000	—	—	—						5,000
	4.2.2. Develop training content and adapt to results of needs assessment	—	5,000	—	—	—						5,000
	4.2.3. Produce training materials	—	100,000	—	—	—						100,000
	4.2.4. Develop SOPs for post-harvest handling and quality control (GSP, GWP, GHP, IPM, inventory management)	—	2,500	—	—	—						2,500
	4.2.5. Establish digital farmer-to-miller registry for each upgraded centre, mapping farmers by	150,000	50,000	50,000	25,000	25,000						300,000

	district, season, volume, and paddy variety											
	4.2.6. Train a pool of 50 master trainers including mindset change/patriotism module	—	25,000	—	—	—		5000	5000	5000	5000	45,000
	4.2.7. Organise and conduct training workshops and practical demonstrations for 5,000 mapped farmers, FBO leaders, aggregator, miller and warehouse staff (min. 50% women and youth)	—	—	550,000	—	—						550,000
	4.2.8. Implement a monitoring system for training effectiveness	—	20,000	—	—	—	20,000		20,000	20,000		80,000
	4.2.9. Develop targeted training programs for youth and women on operation of upgraded mills and aggregation centres	—	—	50,000	50,000	50,000			50,000		50,000	250,000
	4.2.10. Implement mentorship and support programs to encourage women and youth participation in the rice value chain	—	—	40,000	30,000	30,000						100,000
SUBTOTAL 4.2		**150,000**	**207,500**	**690,000**	**105,000**	**105,000**	**20,000**	**5,000**	**75,000**	**25,000**	**55,000**	**1,437,500**
												0
4.3. Construct Storage and Aggregation Centres with Hermetic	4.3.1. Conduct needs assessment and develop standardised designs and specifications for different scales/types of storage	—	200,000	—	—	—						200,000

Systems, Silos, Drying Floors and WRS Integration	4.3.2. Procure equipment for new storage facilities in prioritised rice-producing districts	—	2,500,000	2,500,000	2,500,000	—						7,500,000
	4.3.3. Upgrade and operationalise 50 aggregation centres (including satellite centres closer to farmers) with improved storage facilities and transportation logistics	—	2,500,000	2,500,000	2,500,000	—					7,500,000	15,000,000
	4.3.4. Procure and install specified handling and quality control equipment (cleaning, weighing, drying, bagging)	—	834,000	834,000	834,000	—						2,502,000
	4.3.5. Conduct routine training on facility operations and management including Business Mindset Change training	—	—	84,000	84,000	84,000						252,000
	4.3.6. Establish monitoring system to track post-harvest losses and quality metrics at each facility (moisture meters, grading machines)	—	—	—	20,000	—						20,000
	4.3.7. Procure and install hermetic storage systems and silos of standardised capacities (1,000MT, 2,000MT, 10,000MT) at each aggregation centre	—	3,000,000	4,000,000	3,000,000	—						10,000,000
	4.3.8. Construct covered drying floors or install mechanical dryers (biomass/solar) to dry paddy to 12–14%	—	1,000,000	1,000,000	—	—					2,000,000	4,000,000

	moisture content at all storage centres											
	4.3.9. Onboard all 50 aggregation centres onto the Warehouse Receipt System (WRS)	—	200,000	300,000	300,000	200,000						1,000,000
	4.3.10. Establish Guaranteed Minimum Floor Price mechanism for paddy and milled rice with seasonal communication via community radio and FBO networks	150,000	100,000	100,000	100,000	100,000						550,000
SUBTOTAL 4.3		**150,000**	**10,334,000**	**11,318,000**	**9,338,000**	**384,000**	**0**	**0**	**0**	**0**	**9,500,000**	**41,024,000**
												0
4.4. Stakeholder Engagement and Structured Market Linkages	4.4.1. Develop partnerships with wholesalers, importers, distributors, and state institutions (NAFCO, GCX) to ensure steady market for rice at upgraded centres	—	—	—	50,000	—						50,000
	4.4.2. Promote centre usage through awareness campaigns and training on marketing strategies to enhance visibility and efficiency of rice distribution	—	—	—	50,000	50,000					100,000	200,000
	4.4.3. Formalise MOU-backed offtake agreements with state institutions (GSFP, GHS, Armed Forces, Prison Service, public	100,000	100,000	50,000	—	—						250,000

	universities) with pre-agreed volumes and fast-track Treasury disbursement timelines											
	4.4.4. Develop structured supply and shelf-space agreements with supermarket chains and wholesale market associations (Makola, Malamata, Kumasi Central)	—	150,000	150,000	100,000	—						400,000
	4.4.5. Formalise NAFCO pre-committed off-take MOU with dedicated Treasury budget line and 30-day payment guarantee	100,000	50,000	50,000	50,000	50,000						300,000
	4.4.6. Develop and launch national "Ghana Rice First" consumer awareness and domestic rice branding campaign (radio, TV, social media, community engagement)	—	200,000	400,000	400,000	200,000		200,000	200,000	200,000		1,800,000
	4.4.7. Establish real-time digital rice price and market information platform accessible via mobile and community radio for all rice-producing districts	300,000	100,000	100,000	50,000	50,000		50,000	50,000	50,000	50,000	800,000
SUBTOTAL 4.4		**500,000**	**600,000**	**750,000**	**700,000**	**350,000**	**0**	**250,000**	**250,000**	**250,000**	**150,000**	**3,800,000**
												0
4.5. Import Competition Response and	4.5.1. Commission assessment to quantify illegal/undervalued	200,000	—	—	—	—						200,000

Trade Protection Advocacy	overland rice imports and map smuggling routes											
	4.5.2. Formalise "Ghana Rice First" procurement policy requiring government institutions to source 100% of rice from certified domestic millers	100,000	50,000	—	—	—						150,000
	4.5.3. Implement roundtable between Ghana rice value chain actors (CARP/GRIB) and importing community (FABAG) with MoFA as moderator to fashion mechanism for importers to commit 25–40% of import bill to certified domestic millers	100,000	100,000	100,000	50,000	50,000						400,000
SUBTOTAL 4.5		**400,000**	**150,000**	**100,000**	**50,000**	**50,000**	**0**	**0**	**0**	**0**	**0**	**750,000**
												0
ANNUAL TOTALS		**13,740,000**	**34,391,500**	**23,498,000**	**10,343,000**	**1,059,000**	**220,000**	**505,000**	**595,000**	**575,000**	**10,025,000**	**94,951,500**
Contingency (10%)												9,495,150
GRAND TOTAL												**104,446,650**

ANNEX 4 : Financing Strategy

4.1 Cost Estimates of the Investment Plan

Actions	Total (USD)	Total (USD)
Action 1: Improvement of the Organizational Framework of the sector	19,233,325.13	11,539,995.08
Action 2: Sustainable improvement of productivity	1,295,735,932.70	777,441,559.62
Action 3: Improvement of post-harvest processing and marketing	66,865,256.99	40,119,154.19
Action 4: Coordination	97,774,163.20	58,664,497.92
TOTAL	**1,479,608,678.02**	**887,765,206.81**

4.2 Sources of funding: public budget, private sector, and donors

To achieve financing for the NRIAP, a diversified and mix of public-sector resources, private investment, and support from development partners is necessary.

Table 1: Funding sources for the NRIAP

Funding Source	Target Share	What They Fund in the Rice Value Chain
Public Sector (Government)	20–30%	Capital and recurrent budget allocations to MOFA and other agencies involved in implementation, e.g. GIDA.
Development Partners	45–55%	AfDB, World Bank, IFAD, JICA, GIZ MOVE Programme, UN agencies, and bilateral financing of rural infrastructure and irrigation schemes, skills development, industrialisation, climate-resilient agricultural systems, promotion of agri-entrepreneurship, business development services (BDS), improved milling technologies, climate-smart production practices and market linkage incentives
Private Sector	15–25%	PPP investments of services, support on machinery, and (partial) credit risk guarantees.
Innovative / Blended Finance	10–20%	Blended finance facilities, credit guarantees, improvement of loan terms, climate and green finance, investment platforms supporting irrigation, mechanisation, renewable energy, and processing infrastructure.
Farmers & Cooperatives	5–10%	Cost-sharing for inputs, mechanisation services, small equipment, local storage, community infrastructure, and cooperative-based savings and credit schemes.

4.3 Funding Gaps and Financing Scenarios

The review of active projects in the rice sector shows that there are 24 projects for an amount of nearly 329 million USD. To this should be added the project under formulation with the AfDB (EEWARD, for an amount between 30 and 40 million USD).

Financing opportunities are to be sought on the one hand from institutional actors and on the other from private-sector actors.

As regards institutional actors, the State, through its will to support the development of the sector, could increase the share allocated to the sector in the national budget. To this will be added forthcoming support and, in the start-up phase, contributions from technical and financial partners.

Concerning the private sector, both national and international, with the improvement of the business environment, projects are in the start-up or formulation phase, in order to reduce the financing risks of the sector and thus encourage greater involvement of private actors in the rice value chain.

The coordination of the actions of the investment plan will be carried out by the Ministry of Agriculture through the ANDR as the supervisory institution. It is responsible for the management of funds for the implementation of the plan.

ANNEX 5 : Implementation Arrangements

5.1 Operationalisation of the Investment Priorities

This chapter will outline the delivery mechanisms for each investment priority. Activities will be categorised based on their readiness for immediate investment. The implementation approach heavily depends on alignment with existing national structures and regional coordination mechanisms under the ECOWAS Regional Rice Roadmap (2025–2035).

5.2 Coordination Mechanisms

Coordination Mechanism		
Rice Innovation Platform	Create synergy between all rice sector actors to stimulate and support the development of rice production and processing.	Centralisation of technological innovations in the rice sector; coordination with IRAG and ANPROCA-FE for the extension of technologies in the production and processing of local rice.
Apex Organizations of the Rice Sector	Coordinate and cooperate between the various actors/links; contribute to good management of the sector; ensure compliance with regulatory texts; participate in the development and establishment of an indicative price-setting mechanism; ensure sectoral monitoring and data production.	Contribution to the definition of equipment and input needs of actors; ensures the availability of inputs; setting up mechanisms to guarantee remunerative prices; mobilization of financial resources; constitution of a database of sector actors; contribution to the extension of agricultural technologies; support for the mechanization of agricultural work; advocacy for sector regulation, the establishment of insurance and tax reduction mechanisms, subsidies, bonuses, etc.
Rice Importers	Ensure the supply of rice to Togo; contribute to filling the national rice deficit.	Mobilization of financing to ensure rice production at the national level; investment in the production and processing of local rice; distribution of net local rice.

5.3 Coordination with private sector and development partners

The institutional framework for the implementation of the action plan constitutes a privileged framework where all public actors, consular institutions, the private sector, and development partners will exchange views and ensure that everyone effectively plays their role. The organization of this framework essentially focuses on the construction of an inclusive policy dialogue mechanism on the development of the rice sector.

In addition to this dialogue framework, the governance of the sector will rely on three mechanisms:

- A quarterly joint communication by the Minister in charge of the agricultural sector to the Council of Ministers, allowing the highest authorities to be informed about the implementation process;
- A six-monthly inter-ministerial Council on the implementation of the action plan, under the auspices of the Prime Minister, which will be a framework for the preparation of the Joint Review of the Rice Sector;
- A Joint Review of the Rice Sector, under the Presidency of the Government.

These will serve as a springboard towards the biennial peer review of the Malabo Declaration.

Coordination with the private sector, including rice mills, input suppliers, service providers, banks/MFIs, wholesalers/distributors, will be at the very heart of the implementation mechanism of the action plan. This coordination will take place within a public-private partnership (PPP) framework where the State will effectively play its sovereign role and the private sector its own.

With the TFPs (JICA, AFD, World Bank, AfDB, IFAD, UNDP, WFP, AfricaRice, etc.), coordination will take place with the Rice Thematic Group, led by the FAO, in the framework of mobilising financial resources and technical support.

5.4. Communication Plan and Objectives

5.4.1 Objective

The communication plan supports the NRIAP's goal of rice self-sufficiency by 2035 through four specific aims: building stakeholder understanding of NRIAP objectives and targets; mobilising active producer participation, especially among women and young people; attracting public and private financing; and aligning the interventions of technical and financial partners.

5.4.2 Audiences

Communication is tiered by proximity to delivery:

Tier	**Audience**	**Why they matter**
Primary	600,000 rice producers (≥40% women); farmer organisations and rice inter-professional bodies; decentralised technical services	Direct delivery and adoption
Secondary	Sector ministries (agriculture, budget, trade, environment); TFPs (FAO, IFAD, AfDB, EU, WB); NGOs and agricultural projects	Financing, coordination, policy alignment
Tertiary	National media and ≥60 community radios; general public	Awareness and broad legitimacy

5.4.3 Strategy and Key Messages

The strategy applies *communication for development* principles, prioritises rural radio, decentralises delivery to the regions, mainstreams gender and youth, and anchors all messaging in measurable NRIAP results.
Strategic Messages

- "The NRIAP aims for a national production of 5 million tonnes of paddy rice by 2035."
- "The development of rice can create more than 300,000 rural jobs, particularly for young people."
- "The NRIAP directly contributes to the reduction of rice imports by more than 50%."

Technical Messages (producers)

- "The NRIAP supports the increase of average yields from 2.5 t/ha to 5 t/ha."
- "Access to developments, improved seeds and equipment is strengthened."

5.4.4 Channels, Tools and Action Plan

Channel / Tool	Target volume	Lead	Period
National launch event	1 workshop	MA / TFPs	2026
Rural radio broadcasts in national languages	≥300/year	MA / Radios	2026–2035
National television programmes	≥20/year	MA	2026–2035

Institutional social media	≥100,000 reached	NRIAP Unit	2026–2035
Regional workshops	8 regions × 2 workshops	Decentralised services	2026–2028
Brochures, producer fact sheets, radio spots	20,000 / 50,000 / ≥12	NRIAP Unit	2026–2035
Capitalisation products (reports, videos)	Ongoing	NRIAP Unit	2028–2035

5.4.5 Budget

Total: **USD 1,050,000** over the plan period — Media broadcasting (USD 400,000), Workshops and field missions (USD 300,000), Production of materials (USD 250,000), Monitoring and evaluation (USD 100,000).

5.4.6 Expected Results

Result	Indicator	Baseline (2025)	Target (2035)
NRIAP widely disseminated and understood	% of key actors aware of NRIAP objectives	<30%	≥80%
Producers informed and engaged	Number of producers reached	~200,000	≥600,000
Partners mobilised	Share of rice support aligned with NRIAP	Fragmented	≥70%
Strengthened institutional visibility	Communication products disseminated	Low	≥150

5.4.7 Monitoring, Evaluation and Risks

M&E rests on a statistical information system supplying four instruments: a logical framework, a performance framework, quarterly reports, and an annual review of the AWPB validated by the Steering Committee. A rice campaign tracking system — built with the National Agency — will capture data on production, yields, marketing (markets, volumes, prices), consumption, imports, and exports to feed a national rice information system steering the Action Plan. Three field evaluation missions are planned: two mid-term (the first after two years, allowing course-correction on targets) and one final, the latter informing successor strategy documents. The system aligns with CARD's monitoring framework, integrating its core indicators and joining its annual implementation review.

Three principal risks have been identified, each with a corresponding mitigation:

Risk	Mitigation
Weak ownership	Participatory communication
Linguistic barriers	Use of national languages
Weak coordination	NRIAP consultation framework

5.5. Capacity and Support Needs

Table 2: Capacity and Support Needs for Guinea's NRIAP

Actor Group	Capacity Area	Specific Needs
Rice producers	Technical skills	Good agricultural practices (soil preparation, quality seeds, sowing/transplanting, water management, fertilization, weeding, crop protection, post-harvest treatment); climate-smart agriculture; development and management of operating accounts
Rice producers	Organizational capacities	Structuring groups into functional, negotiation-capable cooperatives; basic marketing and accounting management to strengthen savings and financial management; Village Savings

		and Credit Groups (GVECs); management committees for perimeters and water
Processors	Technical skills	Training on standards and quality; capacity building of equipment operators and maintenance workers; use of improved equipment and improved parboiling techniques
Processors	Commercial capacities	Negotiation with buyers and sales sustainability; stock management and paddy quality; linkages between paddy producers and processors
Traders and distributors	Technical skills	Stock management and transport practices to preserve rice quality (addressing the >40% post-mill value loss between mills and consumers)
Research and technical support structures	Technical skills	Capacity strengthening of researchers and extension technicians on developing and disseminating new technologies; recruitment and qualifying training of young researchers and technicians specialised in rice cultivation
Research structures	Support needs (equipment and infrastructure)	Equipment and infrastructure for research structures, including inputs for selection and varietal creation; laboratory equipment for seed conservation

5.4 Implementation Timeline and Phasing

The implementation timeline has been refined to reflect what has already been done in Ghana, what remains incomplete, and where institutional and technical readiness already exists. Several value-chain actions can commence immediately, while irrigation, inland valley development, and cluster-level milling infrastructure require preparation and engineering work.

Table 3: Implementation Summary Table

Action	Key Investments	Estimated Cost (USD)	Projected timeline
Development of the seed system	Seeds	58,984,036.33	2025-2035
Intensification of production and mechanization	Fertilizers (NPK, urea) Herbicides (total and selective) Tractors, combine harvesters, power tillers, motor mowers Construction and maintenance of tracks and structures	442,460,234.00	2025-2035 2025-2035 2025-2035
Irrigation infrastructure	Basic development of plains Rehabilitation of plains Development of lowlands Integration of climate-smart approaches in hydro-agricultural developments	815,175,000.00	2025-2033
Post-harvest and processing	Rice mills/Mini-rice mills Motorized threshers Hullers + de-stoners Packaging plant Storage warehouses Drying-threshing areas Paddy and net rice packaging	36,365,256.99	2025-2035
Improvement of the organizational framework of the sector	Strengthening the structuring of sector actors	19,233,325.13	2025-2035
Capacity building and extension	Coordination, studies, transfer of innovations (10%)	111,033,974.87	2025-2035
TOTAL COST		**1,483,251,827.32**	

ANNEX 6 : Monitoring and Evaluation: Key Performance Indicators

An effective monitoring and evaluation mechanism, placed under the coordination of the Strategy and Development Bureau (BSD), requires the establishment of a system based on a functional and high-performing statistical information system. It includes monitoring and evaluation tools, balance reports, and evaluation reports.

- ***Monitoring and evaluation tools:*** these are: the logical framework, the performance framework, quarterly reports, and the annual review.
- ***Annual review*** of the implementation of the AWPB, which will be prepared and presented to all stakeholders of the action plan and validated by the steering committee. The various balance reports will be capitalized upon and will serve as basic elements for mid-term and final evaluations.
- **Evaluation of the rice campaign:** this will be a mechanism for the collection and analysis of data on production, yields, marketing (markets, volumes, prices), consumption, importation, and exportation of rice. This mechanism will be set up in collaboration with the National Agency. These results will be structured in a rice information system that will help to steer the action plan.
- ***Evaluation of the action plan:*** three field missions will be conducted, two at mid-term and one final. The first mid-term evaluation mission will take place after two years of implementation of the action plan. It will allow the objectives and targets to be readjusted as needed.

The final evaluation, in turn, will be carried out at the end of the strategy. The results of this evaluation will serve in the development of other reference documents.

Table 4: Core Key performance Indicators for Guinea's NRIAP

Indicator Category	Key performance indicators	Definition	Unit of measure	Baseline	Annual target	Endline target	Data source	Frequency
Productivity	Average rice yield per hectare	Measure of productivity per unit of area	Tonnes/ha	2.1	---	4.5	MoA, Surveys	Annual
Access to inputs	% of farmers using certified seeds	Share of producers using improved seeds	%	30%	---	70%	Extension reports	Annual
Infrastructure	Hectares under irrigation for rice	Area developed or rehabilitated for irrigation	Ha	15,000	----	40,000	Irrigation Authority	Semi-annual

Market	Volume of locally processed rice sold	Marketing of local rice	metric tonnes	50,000	---	200,000	Rice Processors Association	Annual
Capacity	Number of farmers trained	Training in good practices, mechanization, etc.	Number	5,000	---	25,000	Project reports	Quarterly
Finance	Volume of agricultural credit in the rice value chain	Total value of loans and grants disbursed	US dollars	1 million USD	---	10 million USD	Banks, MFIs	Annual
Gender/Youth		Inclusive targeting of vulnerable groups	%	20%	-----	50%	M&E Programme	

ANNEX 7 : Risks and Mitigations

Concerning the possible risks that could arise and thus jeopardize the achievement of the strategy's objectives, those identified and analysed are judged to be negligible overall. The strategy can therefore be conducted with the hope of achieving the results.

Although the overall assessment is negligible, mitigation measures have nevertheless been identified. The summary of risks with mitigation measures is given below:

- **Sociopolitical and institutional instability**: The deterioration of the sociopolitical context is a risk that may compromise the success of NRDS2 in this transitional period. The stability of the latter is decisive for the adherence of populations, the confidence of technical and financial partners, and the mobilisation of financial resources.
- The promotion of good governance, based on the principle of subsidiarity, compliance with procurement procedures, administrative and financial management, the establishment of a permanent audit and control system, the alignment and harmonization of TFP interventions, should make it possible to reduce the risks of budgetary management deviations.

- **Weak adherence of stakeholders**: The implementation of NRDS2 involves all actors of the rural world. As a result, coordination and communication are essential so that all stakeholders take ownership of it and can play their roles.
- **Mobilisation of financial resources**: The weak mobilisation of resources could compromise the achievement of the strategy's objectives. The contribution of the State budget does not cover all needs. TFP contributions are highly dependent on the international economic environment, marked by socio-economic and financial crises likely to affect the capacity to mobilise financial resources for the strategy.
- **Land Use Concerns**: Land tenure insecurity is a source of conflict between actors and constitutes an unfavourable climate for investment. The application of the land law through its implementing texts is a condition for securing rice producers and private entrepreneurs.
- **Climate hazards**: The agricultural sector is vulnerable to the effects of climate change. The negative impacts of the latter on the environment and on water resources are likely to compromise the achievement of the strategy's objectives.
- **Non-compliance with technical standards for the implementation of structuring investments**: The infrastructures linked to the action plan must have a service life in line with applied technical standards. Their construction, in which private companies intervene, must be monitored rigorously to lessen the risk linked to the quality of the works.
- **Weak consideration of women and young people**: The strong involvement of women and young people in rice cultivation is essential for the achievement of the action plan's objectives. Thus, they must be closely associated with all actions. Positive discrimination measures in favour of women and young people are therefore necessary.