



Gambia (The)

# National Agricultural Land and Water Management Development Project

**Project Completion Report** 

Main report and appendices

 Mission Dates:
 19/10/2020 5/11/2020

 Document Date:
 15/05/2021

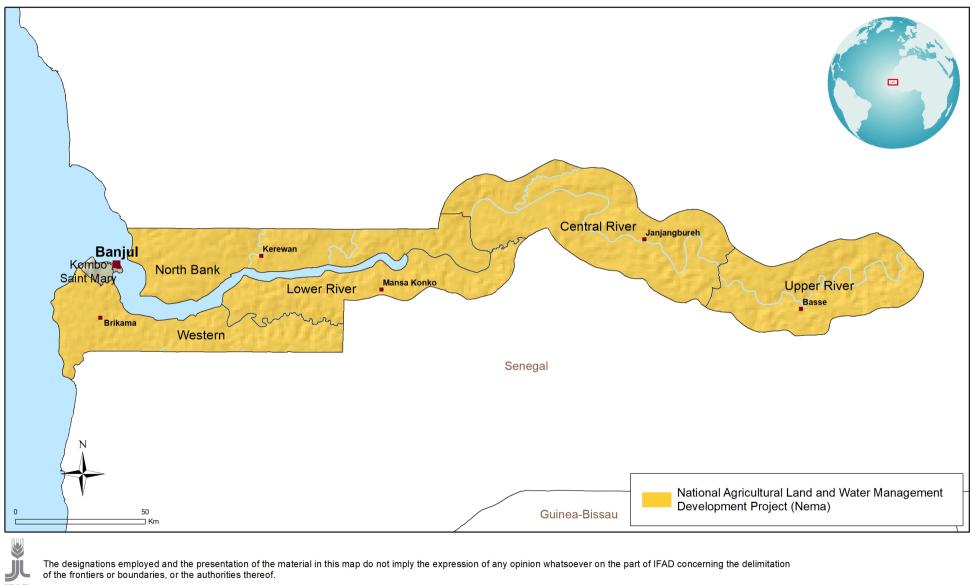
 Project No.
 1100001643

 Report No.
 5635-GM

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West and Central Africa Division Programme Management Department

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IFAD Map compiled by IFAD | 25-11-2020

# **Currency Equivalents**

Currency equivalents

Currency Unit	=	
US\$1.0	=	
Weights and measures		
1 kilogram	=	1000 g
1 000 kg	=	2.204 lb.
1 kilometre (km)	=	0.62 mile
1 metre	=	1.09 yards
1 square metre	=	10.76 square feet
1 acre	=	0.405 hectare
1 hectare	=	2.47 acres

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# Abbreviations and Acronyms

ARD	Agricultural Regional Directorate
AS	Agribusiness Services
ASAP	Agricultural Smallholder Adaptation Programme
AVIP	Agricultural Value Chain Interaction Platform
AWPB	Annual Work Plan and Budget
BDO	Business Development Officer
CAP	Community Action Plans
CC	Climate Change
CISF	Capital Investment Stimulation Fund (matching grant)
CPCU	Central Project Coordination Unit
CSA	Climate Smart Agriculture
DA	Designated Account
DCD	Department of Community Development
DOA	Department of Agriculture
DSM	Direct Supervision Mission
EB	Executive Board
FAOR	Food and Agriculture Organization Representative
FFS	Farmer Field School
FHH	Female Heads of Households
FINEX	Financial Expert
FO/WUA	Farmer organization / Water User Association
GCCI	Gambia Chamber of Commerce and Industry
GoTG	Government of The Gambia
GPPA	Gambia Public Procurement Authority
GYIIN	Global Youth Initiative Network
HTS	Horticulture Technical Services
HTS	Horticultural technical services
IA	Internal Audit
ICP	IFAD Client Portal
IFAD	International Fund for Agricultural Development
IP	Implementing Partner
IPM	Integrated Pest Management
IsDB	Islamic Development Bank
ISSAI	International Standards of Supreme Audit Institutions.
ITA	International Technical Assistance
Kafos	already ongoing groups
KM	Knowledge Management
LRR	Lower River Region
M&E	Monitoring & Evaluation
MDFTs	Multi-Disciplinary Facilitation Teams

MIS	Market Information System
ММС	Market Management Committee
МоА	Ministry of Agriculture
MoFEA	Ministry of Finance and Economic Affairs
MoU	Memorandum of Understanding
МТВ	Major Tender Board
MTR	Mid-Term Review
NACOFAG	National Coordinating Organization for Farmer Organization of the Gambia
NAPA	National Adaptation Plan of Actions
NARI	National Agricultural Research Institute
NaWFA	National Women Farmer Association
NBR	North Bank Region
NCC	National Climate Change Committee
NEMA	National Agricultural Land and Water Management Development Project
NGO	Non-Government organization
PCR	Project Completion Review // Project Completion Report
PD	Project Director
PDR	Project Design Report
PIM	Project Implementation Manual
PIWAMP	Participatory Integrated Watershed Management Project
POs	Producer Organizations
PP	Procurement plan
PPS	Plant Protection Services
PS	Permanent Secretary
PSU	Project Support Unit
SDR	Special Drawing Right
SE	Supervising Engineer
SoE	Statements of Expenditure
SP	Service Providers
SWMS	Soils, Water Management Service
ToR	Terms of Reference
ТоТ	Training of Trainers
UNDP	United Nations Development Programme
VFAs	Village Farmers Associations // or Village Field Assistants
WA	Withdrawal Application
WARF	West African Rural Foundation
WCR	West Coast Region
WUG	Water Users Group

# Project at a glance

Region West and Central Africa Division	Project at Risk Status Not at risk
Country Gambia (The)	Environmental and Social Category B
<b>Project Name</b> National Agricultural Land and Water Management Development Project	Climate Risk Classification 2 - Medium
Project ID 1100001643	
Project Sector Irrigation	
CPM Benoit THIERRY	
Project Area not available yet	

# Key Dates

IFAD Approval	Signing	Entry into Force	Mid-Term Review	Original Completion	Actual Completion
10/12/2012	20/12/2012	20/12/2012	20/02/2018	31/12/2019	30/06/2020
		Original Financial Closure	Actual Financial Closure		
		30/12/2020	not available yet		
Date of Last SIS Mission	Number of SIS Missions	Number of extensions	Effectiveness lag		
08/12/2019	13	1	0 months		

# IFAD Financing as at the time of PCR submission

Grant	XDR Million	13.1 Million	% disbursed	100.0
Additional Financing Loan	XDR Million	5.02 Million	% disbursed	100.0
Additional Financing Grant	XDR Million	8.56 Million	% disbursed	100.0

## Actual Costs and Financing (USD '000) as at the time of PCR submission

Component	IFAD	Cofinancing	Domestic	Total
	Actual	Actual	Actual	Actual
Post-harvest clim. resil. agri-bus invest. su	15 848		11 754	27 603
HUB capacipty dev. prog & bus. coaching	12 728		948	13 677
Project Manag and coordination	5 102		1 077	6 179
Total	0	0	0	0
Remarks				

Outreach

Direct Beneficiaries	
Number of HH members	Number of persons receiving services

Estimated total: 413 712	Total: <b>91 936</b>
	Males: 22 524
	Females: 23 444
	Young: 15 399
	Not Young: 0
	Indigenous people: 0
	Non-Indigenous people: 0

# **Project Objectives**

#### Access to natural resources

The overall goal of the project is to reduce the poverty of rural women and young people. The development objective is to increase their incomes through improved productivity based on sustainable land and water management practices.

#### **Country Partners**

Executing Institution	Ministry of Agriculture
Implementing Institutions	not available yet

# Project Completion Ratings Matrix

COUNTRY: Gambia (The)		
<b>PROJECT NAME:</b> National Agricultural Land and Water Management Development Project		
PROJECT ID: 1100001643		
BOARD APPROVAL DATE: 10/12/2012		
ENTRY INTO FORCE: 20/12/2012		
PROJECT COMPLETION DATE: 30/06/2020		
LOAN CLOSING DATE: 30/12/2020		
IFAD LOAN AND GRANT (USD MILLION): \$39,411,531		
TOTAL PROJECT FINANCING: \$76,587,134		
IMPLEMENTING AGENCY: not available yet		
Criterion	PCR Rating	
Project performance		
	5	
	5	
	4	
	4	
	5	
	5	
- Human and social capital	5	
- Food security	5	
- Agricultural productivity	5	
- Institutions and policies	5	
Additional evaluation criteria		
- Gender equality and women's empowerment	6	
- Innovation	5	
- Scaling up	5	
- Environment and natural resource management	5	
- Adaptation to climate change	4	
- Targeting and outreach	5	
- Access to markets 5		
Partners performance		
- IFAD's performance	5	
- Government performance	5	
Overall project achievement	5	

## **Executive Summary**

The joint Project Completion Review mission took place from 19 October to 12 November 2020 in two steps because of the pandemics of COVID-19: the first part of the mission was on the ground in Banjul and selected project sites from 19 to 30 October and then the second part virtually from 2nd to 12th November 2020.

The National Agricultural Land and Water Management Project (NEMA), approved by IFAD in December 2012, became effective in December 2012. The NEMA-Chosso was implemented from 1st January 2013 to 31st December 2019 with a loan closure and finally extended to 30 December 2020. Consequently, the Government of Gambia jointly with IFAD has decided to undertake the project completion review (PCR) mission to assess and report on the relevance, the effectiveness, the efficiency, the effects and impacts, and the sustainability and ownership of major project results and achievements.

The Gambia is among the poorest countries in the world. Approximately 57.2 per cent of the population are "multidimensionally" poor while an additional 21.3 per cent live near the multidimensional poverty line. Rural poverty, food insecurity and malnutrition are closely associated with low productivity, particularly in the rain-fed sector. Poverty levels remained essentially unchanged, and the estimated annual 3.5 percent GDP growth rate is not sufficient to meaningfully reduce poverty.

Agriculture is the principal source of livelihood for the rural population and for the majority of households below the poverty line. It provides employment for approximately 70% of the population but contributing only 24% of the GDP. Farming is mainly rain-fed, with an estimate of 3% of arable land under irrigation. The Gambia is the most vulnerable country to climate change. It has experienced severe drought in the recent years (2011 and 2014), and has led in the past to a drop of production of 50%. The accelerating effects of climate change relative to rising sea level and reduced rainfall have increased saltwater intrusion to 150-200 km inland, which also affect productivity.

The vision of the NEMA Project was to support the Government of The Gambia (GOTG) in strengthening the agricultural sector in order to increase productivity, improve farmers' income, expand the rural economy for employment generation and reduce food imports. The goal was to reduce poverty among rural women and youth. The corresponding verifiable indicators established for the goal are at least 23,560 rural households achieving a 25% increase in their asset index; a 30% reduction in child malnutrition; and a reduction in the rice "hungry season" from five to two months a year. The overall objective of the project was to increase the incomes of women and young people in rural areas by sustainably improving productivity of lands and better water management practices.

The NEMA project covered 6 of the 7 regions of the Country, namely, West Coast, Lower River, North Bank, Central River (N), Central River (S) and Upper River Regions. The project was demand-driven in the sense that all the interventions were requested by the villagers through the Department of Agriculture regional offices in the 6 rural regions.

The project was implemented through the three following components: (i) watershed development, (ii) agricultural commercialization; and (iii) project facilitation. Interventions through all of these components are aimed at increasing the area of cultivated land and boosting their productivity, improving post-harvest practices and marketing, particularly for vegetables.

The various evaluation criteria are described in the appendix 3 (PCR rating matrix) and summarized here below.

#### Relevance

The GotG has made food, nutrition security, and climate resilience a national priority to transition to a green economy driven by SME private sector investment and delivering sustainable and inclusive benefits through the inclusion of youth and women as key economic actors. This is translated into key national policies such as the National Development Plan (NDP) 2017-2020, Agriculture and Natural Resources Policy (ANR 2017-2026), The Gambia National Gender Policy (2010-2020) and National Youth Policy (2009-2018)

The project design and objectives were relevant to the context of the Comprehensive Africa Agricultural Development Programme (CAADP); the Gambia National Agricultural Investment Programme (GNAIP), the West African Agricultural Productivity Programme (WAAPP), and the 2019-2024 IFAD COSOP and capitalizes on IFAD experiences in reducing poverty in The Gambia by supporting resilient, women and youth-inclusive and nutrition-sensitive value chains.

#### Effectiveness

Outreach: The project has surpassed its target outreach (29,429HH) by 156% (45, 968HH). Women and youth comprise 51% and 33.5% of the rural farming population and more than 80% of rice and vegetable growers. This is consistent with the project's key target group, being women and youth. Project investments have enabled access to productive land for 4,630 rural households engaged in upland crop production, 12,733 in lowland swamp rice production, 431,5 in tidal rice production, 6,600 vegetable growers and promoted natural resource management and adaptation practices amongst more than 26,600 households, including ecosystem restoration initiatives (woodlots 18ha), Agroforestry, 78ha and mangrove planting 1831ha) in 8,409 households and

#### communities.

#### Efficiency

Project implementation was efficient, and the project investments represented good value for money. Most project activities were implemented within schedule, and certain ahead of time and within budget. A re-estimated EIRR at 19% with a Net Present Value of USD 52,338,686.80 is slightly lower than the EIRR of 21.8% with an NPV of USD 54,192,090 realized at appraisal, which can be attributed to the delayed completion of infrastructure for both tidal and vegetable schemes inhibiting their optimal operationalization.

The project has thus remained a financially and economically viable and an attractive investment. More importantly, the EIRR also stabilized above the 10 % discount rate (the opportunity cost of capital). Project implementation arrangements and procedures were efficient and output delivery was non-problematic with good achievements as indicated above in effectiveness.

#### Sustainability

Project intervention sites were not predetermined, and beneficiaries submitted requests for assistance, which were assessed, by a multidisciplinary committee (TAC at regional level) and recommendations forwarded to the project for intervention. Interventions represented the felt-needs of the beneficiaries and as such represented high likelihood for sustainability.

The project has formed key beneficiaries into groups (village farmer associations -6 males and 6 females - in each intervention community) which has effectively facilitated project implementation, beneficiary participation and ultimately, ownership of the outcomes.

Key project interventions (land development for rice and vegetable production) are by nature income generating. Key producer groups were formed and strengthened with relevant entrepreneurship and governance skills (24 Producer Groups). The beneficiaries opened bank accounts into which they contributed part of their proceeds from harvest for the sustenance of the infrastructure provided. Water Users Groups for rice and vegetable producers have been formed for efficient and sustainable use of water.

The continuation of most project benefits is most likely ensured beyond project completion, with most important dimensions of sustainability being positively assessed. There is full beneficiaries' ownership of project interventions and full government support and commitment. A realistic post-project sustainability strategy supported by all project stakeholders had been defined in the course of implementation. The strategy (validated by key stakeholders including beneficiaries, the government and the private sector) details most institutional arrangements, egal aspects, ownership and post-project funding.

#### Households' incomes and assets

The RIMS End line Report compared with the RIM Baseline figures records increased household asset holding among project beneficiaries, with strong highlights on women. Among the key assets covered in the study, the proportion of households reporting ownership of radio and mobile telephones during the project end line period stands at more than 92% and 97% respectively. Compared to baseline values of 79% and 89%, it can be inferred that higher numbers of beneficiaries have invested in assets related to information and communication. Similarly, the proportion of households reporting access to electricity, refrigerators and animal drawn carts stand at 37%, 18% and 65% respectively. Ownership of poultry, sheep and goats, which are predominantly owned by women have recorded significant increases: poultry increased from 79% at baseline to 86% at end line, sheep from 35% to 47% and goats from 57% to 62%.

Key matching grant beneficiaries (Tractor owners at Massembeh and Sabach Sukoto, the Solar irrigated garden at Mandinaba, Chilli processing factory at Bakau, etc) have demonstrated income increase effects, creating jobs and improving their livelihoods (constructed new homes, etc).

Analysis of the asset categories in the said Impact Survey Report suggests that the project has had a positive effect on investments in assets for increased access to information, communication, electricity, storage and transportation. It is important to note that these assets have the potential for significant contribution to revenue and income generation along the key agricultural value chains of the project: rice and vegetables.

#### **Rural poverty impact**

The project has achieved its impact target for reduced poverty of rural women and youth for 37,234 producer households. This achievement exceeds the target 2,943 by more than 1200%. All of the following results together have a combined positive effect on overall poverty reduction for beneficiaries:

- increases in incomes for producers, as recorded above;
- reduction in food insecurity gains recorded above;
- strengthened social capital and capacity among project beneficiaries;

- increased number of rural enterprises created;
- the creation of Producer Organizations, MIS and the AVIP promote linkages to markets and thus increasing market efficiency and profitability of rice and vegetable production;
- increases in productivity of rice and vegetables as recorded;
- increases in the adaptive capacities of producers to climate effects.

#### Lessons learnt, knowledge generated and innovations.

The implementation of the NEMA-Chosso has generated a series of lessons (both successes and failures) learned that could guide ongoing and future project design and implementation in The Gambia and elsewhere. The lessons learned, the knowledge generated, the challenges for an improved knowledge management and communication are detailed in section G of this report and appendix 3 and annexes 1 (Lessons learned Chosso Design), Annex 2 (Innovation Table) and 3 (Knowledge management and communication Development).

On the basis of the project performance, several institutions are keen now to replicate some of the positive results of the NEMA Chosso project including:

- Ecowas project which aims to support women and youths in the Gambia has shown interest in upscaling NEMA youth and women initiatives;
  - Ministry of Agriculture is interested in the Agriculture Value Chain Interaction Platform (AVIP) and Compost Chamber;
  - FAO also keen on the Agriculture Value Chain Interaction Platform (AVIP) which is a partnership jointly implemented by the West Africa Rural Foundation (WARF) based in Dakar, Senegal and the Global Youth Innovation Network Gambia Chapter (GYIN Gambia Chapter), a youth network focusing on rural developments in the Gambia;
  - World Bank Projects in country are keen to upscale birds and vertebrates' pest control techniques developed and successful in scaring birds and monkeys in places such as rice fields at Pakalinding;
  - IFAD ROOTS project identified the Producer Organizations, AVIP and MIS for upscaling;
  - Model Woodlot fitted with water system, a pilot by the project to promote forest enrichment. Department of Parks, Wildlife, and Forestry are keen on this, as well as the Ecosystem-based Adaptation Project funded by UNEP.

#### **A. Introduction**

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- 1. The National Agricultural Land and Water Management Project (NEMA), approved by IFAD in 1<sup>th</sup> December 2012, became effective and entered into forced on 20<sup>th</sup> December 2012. The NEMA-Chosso was implemented from 1<sup>st</sup> January 2013 to 31<sup>st</sup> December 2020 with a loan closure set to 30 June 2020 and extended to 30 December 2020. Consequently, the GoTG jointly with IFAD decided to undertake the project completion review (PCR) mission to assess and report on the relevance, the effectiveness, the efficiency, the effects and impacts, and the sustainability and ownership of major project results and achievements. For this purpose, a project exit strategy was designed to contribute to ownership as well as project sustainability and the pre-PCR studies included, among others, the followings: RIMS End line; Resilience Profile End line; Assessment of effectiveness of capacity building support; Documentary on Key innovations and lessons learned (Compendium); Video documentary on NEMA Achievements and Innovations.
- 2. IFAD supported the Government during the whole process, from the production of the Terms of reference, to the selection of the consultants needed and the conduct of the pre-PCR studies and the participation to the discussions with the Government representatives and the NEMA staff as well as implementing partners. The PCR mission took place from 19th October to 12th November 2020 in two steps because of the pandemics of COVID-19: the first part of the mission was on the ground in Banjul and selected project sites from 19th to 30th October and then the second part virtually from 2nd to 12th November 2020.
- 3. During the field visits, the Mission met with several groups of project beneficiaries, various service providers including extension services and private operators as well the implementation partners (contractors and consultanta in charge of site control). The Mission findings and recommendations as well as the notation matrix were fully discussed with the project staff. Due to the Covid-19 pandemics, the usual stakeholders' workshop to validate the recommendations did not yet take place but the content of the report will afterwards be largely discussed by the project staff and the main stakeholders at a later date.
- 4. The Mission is very thankful to the Government representatives including the Honourable Minister of Agriculture, the Permanent secretaries of the Ministries of Agriculture and Finance as well as the UN Coordinator and all the other partners who participated in the project completion review mission and contributed to discussions during the field visits and the subsequent virtual meetings. The Mission also thanks the project director/ coordinator and all the

relevant staff of the project staff unit.

# **B. Project Description**

#### **B.1. Project context**

#### A.1. Project context

- 5. At the time of design, in 2012, The Gambia was considered as a poor and low-income economy with a GDP per capita of USD 743, an annual growth rate of -2.62% and a low Human Development Index (HDI) of 0.44 with a ranking of 173 out of 187 countries. The development frameworks at the time comprised the Gambia Incorporated Vision 2020(1996-2020), the medium-term Programme for Accelerated Growth and Employment (PAGE) 2012-2015 and the Millennium Development Goals (MDG) of 2010-2015 all focused on reducing food insecurity and poverty, sustaining the environment and gender equity. The Project was aligned with GNAIP (2011-2015) particularly on the programmes of Improvement of Agricultural Land and Water Management; Development of Agricultural value chains and market development; and Sustainable Farm Development.
- 6. Poverty data, at that time from the Integrated Household Survey (IHS, 2010) indicated a national poverty rate of 48.4% (using USD 1.25) with the urban areas having a much lower poverty rate (32.7%) compared with the rural areas (73.9%). Among the socioeconomic groups, household heads employed in the agricultural and fisheries sector had higher poverty rates (79%) compared to other household heads in other sectors. It also revealed that household heads with no education had the highest poverty rates (58.4%) and that Female headed households had lower poverty rates (38.3%) compared to their male counterparts (50.9%).
- 7. The National Development Plan 2018-2021 (NDP abridged version, 2018) recognizes three sub-sectors (horticulture, rice and fisheries) in agriculture as some of the productive sub-sectors that have the potential to drive the economy. The NDP promises, under pillar 3, to modernize the agriculture and fisheries for sustained economic growth, food and nutritional security and poverty reduction.
- The Gambia's CAADP document, the National Agricultural Investment Programme Food & Nutrition Security 2019-2026 (GNAIP II - FNS) also recognizes the crops and vegetable value chains as one of 6 priority pillars. The crops and vegetable value chains alone account for 46.15% of the total estimated cost by priority intervention area (Table 16, Pg. 1 GNAIP II 2019).
- 9. The agriculture sector contributes 20% to 30% of the national GDP and employs most of the country's rural population. Being undiversified, smallholder, subsistence and dependent on rainfall characterize the sector.
- 10. The NEMA project intervened in 6 out of 7 regions. The 6 regions of intervention constitute the rural regions of the country; namely, West Coast, Lower River, North Bank, Central River (N), Central River (S) and Upper River Regions. The project was demand-driven in the sense that all the interventions were requested by the villagers through the Department of Agriculture regional offices in the 6 rural regions.

#### **B.2. Project objectives**

- 11. The vision of the NEMA Project was to support the GoTG in strengthening the agricultural sector in order to increase productivity, improve farmers' income, expand the rural economy for employment generation and reduce food imports.
- 12. The goal was to reduce poverty among rural women and youth. The corresponding verifiable indicators established for the goal were: at least 23,560 rural households achieving a 25% increase in their asset index; a 30% reduction in child malnutrition; and a reduction in the rice "hungry season" from five to two months a year.
- 13. The overall objective of the project was to increase the incomes of women and young people in rural areas by sustainably improving productivity of lands and better water management practices.
- 14. The specific objectives were:
  - 1. increasing household incomes (4,000 households achieving a 15% increase in income from upland crops),
  - 2. increasing annual average income of women growing rice in lowland rainfed areas (12,400 women earning USD163,
  - 3. increasing annual average income of women growing rice in irrigated tidal areas (2,000 women earning USD826),

- 4. increasing annual average income of women growing vegetables (4,800 women earning USD744),
- 5. increasing annual average income of the youth engaged in market-oriented vegetable production (360 youth earning USD7,629), and
- 6. increasing annual average income of the youth engaged in fulltime agricultural service businesses (300 youth).
- 15. These objectives were to be achieved through the implementation of three main components in all six agricultural regional directorates; namely: i) watershed development, ii) agricultural commercialization; and iii) project facilitation.

#### **B.3. Implementation modalities**

- 16. In line with arrangements for similar projects, the Ministry of Agriculture (MoA) was the Executing Agency (EA), with the Central Projects Coordinating Unit (CPCU) of the Ministry in charge of the overall strategic coordination and harmonization of investments. IFAD supervised the project directly through its Country Programme Director (CPM). Periodic supervision missions under the leadership of the CPM and with support from relevant experts (identified in consultation with project management staff and key government authorities) represented a key element of IFAD's project supervision modality. A Project Steering Committee (PSC) provided strategic guidance for project implementation, whilst the Project Support Unit (PSU) under the leadership of a Project Director undertook day to day management and implementation of the project.
- 17. Since its inception in 2012, the National Agricultural Land and Water Management Development Project (NEMA-Chosso) has been implemented with financial support from the International Fund for Agricultural Development (IFAD), The GoTG, the Islamic Development Bank (IsDB) and the beneficiaries' contribution.
- 18. NEMA developed a targeting strategy which led to identification of the target groups. The targets were women and youth living in rural areas who earn less than \$2.0 per day. The rural women and youth were engaged mainly in rice and vegetable production for a livelihood. The youth committed themselves to providing in-kind contribution in the form of labour to build, maintenance or repair infra-structure for the benefit of their womenfolk whenever necessary.
- 19. All project staff received training in gender mainstreaming and they all had gender mainstreaming responsibilities in their terms of reference.
- 20. The NEMA strategy was to hold separate women and youth sessions when soliciting for opinions and identifying needs. Women were given preferential access to certain activities and they were directly consulted in planning and implementation. All socio-economic data collected are desegregated by gender and age. The PSU was obligated to select service providers with proven capacity in working with women.
- 21. The project was implemented in six regions through three components which are (i) watershed development, (ii) agricultural commercialization; and (iii) project facilitation. Interventions through all of these components are aimed at increasing the area of cultivated land and boosting their productivity, improving post-harvest practices and marketing, particularly for vegetables, leading to the generation of jobs and therefore additional income for producers and operators at national level.

#### **B.4. Target groups and Targeting Strategy**

- 22. The Project was designed to target smallholders, predominantly women engaged in vegetable and rice production, rice in the lowlands and vegetables being produced mainly by women.
- 23. Rural youth were also targeted both females and males under thirty years of age through inclusion in market-oriented production and (mainly) value addition initiatives in response to increasing demand for technical services. The project initially targeted youth and other groups and SMEs emerging as service providers to primary producers and as post-production value adders and operators in the rice and vegetable businesses.
- 24. The entry point was organized groups of producers with emphasis on women/youth groups. Women were targeted through women and vegetables Kafos as these institutions facilitate independent access to land, farm equipment, credit and training for their members. Priority was given to consolidating the achievements of those women Kafos reached by previous IFAD supported projects as reflected in the gender and targeting strategy elaborated.
- 25. The initial project planned to target youth through youth groups. In the rural areas, very few youths are organized around agriculture and so economic interest groups needed to be mobilized on a pilot case. It was envisaged that more substantial enterprises had to be managed and operated as full-time work for a small number of youth and/or women either independently or within the framework of a larger group.
- 26. Other beneficiaries included emerging post-production value-adders and operators, smallholder farmers interested in becoming contract growers, and regional and village extension workers.
- 27. Chosso reflected the countrywide scope of NEMA, with an inclusive approach to supporting GoTG in mainstreaming climate change in national and regional policies and practices through resilience research and climate policy

dialogue.

# C. Assessment of project relevance

#### C.1. Relevance vis-à-vis the external context

- 28. The NEMA project interventions including tidal irrigation schemes for production of rice; village gardens for the production of fruits and vegetables, access roads and causeways to facilitate farm-to-market access, soil and water conservation to protect against water erosion & related problems, construction of markets for women to sell their garden produce and a matching grant program for the benefit of the agriculture private sector were relevant for the target groups as they addressed their priorities and needs. The support provided to target groups included also provision of small farm tools, implements, supplies (seeds) and services (ploughing and composting).
- 29. The NEMA project also intervened in alleviation of difficulties during the COVID 19 pandemic. The project provided support to the tidal irrigation and village garden beneficiaries. In the gardens the support included provisions of seeds, fertilizers and some PPEs (hand sanitizers, water containers with taps for hand washing and face masks). In the tidal irrigation schemes the project supported ploughing of the fields, supplied improved rice seed and fertilizers.
- 30. Throughout the intervention sites, the beneficiaries unequivocally expressed their appreciation of NEMA and how the benefits from the various enterprises have transformed their lives. Before NEMA, the beneficiaries did not use or used, in a limited way, the rice perimeters or gardens or they experienced unimaginable difficulties to access rice fields. After NEMA's interventions, the beneficiaries have easier access, they cultivate larger areas which has resulted in household food security and fat bank accounts.
- 31. At PCR, the project objectives, activities and investments remain relevant to: (i) the national strategies and policies for agriculture and rural development, (ii) the poverty eradication and (iii) women's socio economic development, which all continue to be core priorities for The Gambia's overall growth and development as contained in several blueprints: the National Development Plan 2018-2021 cross cutting pillar on Empowering the Gambian Woman to realize her full potential through gender mainstreaming, the Gambia National Agriculture Investment Plan on Food and Nutrition Security (GNIAP II FNS) 2019-2026 Priority Programme Areas 1-5 and the country adopted Sustainable Development Goal (SDG) for 2030 on key Goals: 1(No poverty); 2 (Zero Hunger), 5 (Gender equality). Consequently, the inclusion of gender focusing on women at design as contained in the Project Appraisal Document on gender inclusion strategy annex 2 and 12 checklist was fit to context and still remains relevant.
- 32. Livelihood for women in farming communities in the Gambia is based on vegetables and rice production and the deliberate effort to include them as the target was based on a thorough analysis of rural poverty in the Gambia at time. In 2003 about 54% of all female-headed households fell below the poverty line compared with 35% of all male-headed households. At appraisal in 2012, women were among the majority of the poor and extremely poor in the country and poverty was closely linked to their high illiteracy levels, the absence of economic opportunities, and inadequate access to productive resources, including credit, land ownership, skills and support services as indicated in the national gender and women policy 2010-2020.
- 33. Being a demand-driven project, the investments in rice and vegetable for women reflected their felt needs and resulted in them participating at all levels to ensure success. The PCR mission findings are that, where the investments were completed for both rice and vegetable gardens, utilization and satisfaction levels are high and where investments could not be completed for example in the 17 vegetable schemes, they still see the investment as relevant and call for their speedy completion. In the main, the PCR finding upholds the relevance of the vegetable and rice value chains to the women in view of the fact that women were and are still the largest producers of rice and vegetables coupled with the COVID 19 pandemic that put further strains on food security thus necessitating the need to enhance local production of staple foods.

#### C.2. Internal Logic

- 34. The NEMA PDR (December 2012, Section B, Pg. 3) shows that the project design was based on an in-depth problem analysis. In 2012, a rationale, not a 'Theory of Change', was proffered to justify financing the project. The rationale was made up of two parts: a problem statement and a rationale. The problem section characterized the target groups, their rural environment, access to inputs, access to markets and institutional support available to them. The rationale section identified the entry points through which the project hoped to support the target groups to attain the objectives of the project.
- 35. NEMA, at the beginning of project implementation in 2013 had a results matrix with 12 outputs total. At the closing end of 2019, eight (8) out of twelve outputs were achieved and even surpassed in many instances. The successful outputs can definitely be justified for repeat in future IFAD projects but also, they can be promoted by the

government via projects financed by the government and donors. This relative success is mainly due to the adequacy of project implementation modalities including the use of implementation partners, a close and regular control by the relevant ministries of agriculture and finance as well as IFAD, the overall Financial Management (FM) arrangement etc.

#### C.3. Adequacy of design changes

- 36. Most of the infrastructures were constructed as they were designed at the beginning of project. However, in Darsilami village, the garden is equipped, in addition to the basin irrigation system proposed in the project design, with a localized drip irrigation network with ramps spaced 1 meter apart. This system, although it facilitates the distribution of water to the gardens, requires considerable technical expertise and maintenance requirements. This is a modification which cannot be generalized since its adaptation and viability are not guaranteed.
- 37. A second major change was to do with the CISF/matching grants. Before the MTR, the beneficiaries wanting to access the CISF had to submit a business plan, acquire a bank loan equal to 45% of the cost of the plan in order for NEMA to match it. The remaining 10% was contributed by the beneficiary as equity participation. This arrangement was cumbersome for many potential beneficiaries: the bank interest rate was unsupportable and writing a business plan was also difficult for the beneficiaries. Therefore, in order to adapt to the beneficiaries needs, after the MTR, the beneficiaries were required to participate at 40% of the cost of the plan and NEMA would match it with 60% of the cost. The banks were taken out of the arrangement and NEMA agreed to support the writing of the business plan. Subsequently, the project was able to disburse completely.
- 38. Another major change concerned regarding contractors. Before the MTR the eligible contractors were only the Gambian contractors. This led to a problem because only one of them had the capacity to do so, but its equipment was not enough to implement several contracts at the same time. The exclusivity clause was therefore removed in order to allow the local companies to partner with better equipped foreign companies. Consequently, the civil works accelerated and the difficult earth-moving rice perimeters were completed.
- 39. Finally, a revision of project targets and budgets according to new priorities was done during the MTR [when] as well as an increased adoption of watershed development approaches aiming to fast track the execution of this component and including also the elimination of the exclusivity clause.
- 40. The MTR mission recommended:
  - The recruitment of an international irrigation engineer for a minimum of 6-12 months to assist with the design and execution civil works, but this was not done. Consequently, the PCR mission discovered mechanical engineering defects in the tidal irrigation rice schemes.
  - The strengthening of the regional coordination in the south and north bank zones by elevating the rank of field coordinators to the rank of Assistant Project Managers. However, it was not done and any potential negative impact was mitigated by more frequent supervision missions from headquarters.
- 41. The participation of NEMA CISF/matching grants was increased from 45% to 60% without a commensurate increase in the budget allocated to the CISF/matching grants. Consequently, the project achieved only 82% of the revised MTR targets.

#### D. Assessment of project effectiveness

**Outreach**: The project has surpassed its target outreach (29,429HH) by 156% (45, 968HH). Women and youth comprise 51% and 33.5% of the rural farming population and more than 80% of rice and vegetable growers. This is consistent with the project's key target group, being women and youth. Project investments have enabled access to porudctive land for 4,630 rural households engaged in uplandcrop production, 25,466 in lowland swamp rice production, 863 in tidal rice production, 6,600 vegetable growers and promoted natural resource management and adaptation practices amongst more than 26,600 households, including ecosystem restoration initiatives (woodlots 55ha), Agroforestry, 78ha and mangrove planting 1831ha) in 8,409 households and communities.

**Impact**: The project has achieved its impact target for reduced poverty of rural women and youth for 37,234 producer households. This achievement exceeds the target 2,943 by more than 1200%.

*Food security*. The project succeeded in increasing food security for its beneficiaries by reducing the number of food insecure households from 384 at baseline to 283 at endline and duration of the hungry season from 2.8 to 1.2 months (Impact Survey Report, 2019).

*Increased asset holding*: The RIMS Endline Report records increased household asset holding among project beneficiaries, with strong highlights on women. Among the key assets covered in the study, the proportion of households reporting ownership of radio and mobile telephones during the project endline period stands at more than 92% and 97% respectively. When compared to baseline values of 79% and 89%, it can be inferred that higher numbers of beneficiaries have invested in assets related to information and communication. Similarly, the proportion of households reporting access to electricity, refrigerators and animal drawn carts stand at 37%, 18% and 65% respectively. Ownership of poultry, sheep and goats, which are predominantly owned by women have recorded significant increases: poultry increased from 79% at baseline to 86% at endline, sheep from 35% to 47% and goats from 57% to 62%.

**Outcome 1:** Increased incomes, enhanced climate resilience for producers (12,400 women): The project has significantly impacted the poverty levels and enhanced the climate resilience of more than 35,200 rural households, more than 27,000 of them women (more than 26,300 producers of rice and vegetables, 172 enterprises with more than 340 jobs created and 8,409 direct beneficiaries of the ASAP climate adaptation initiatives). This an over-achievement of more than 280% against the design target of 12,400 women.

**Outcome 2**: Rural producers' organizations reporting an increase in sales (25% of POs formed / strengthened): The project has formed and strengthened 24 producer organizations (6 rice POs, 6 Vegetable POs and 12 Agricultural Value Chain Interaction Platforms (AVIP) which are all operational (100%). The effects of these POs are far reaching – (1) promoting group sale and use of market price information system which enables greater bargaining power and fair pricing; (2) linkages promoted between producers and off-takers (private enterprises) with contractual agreements reached through value chain financing; (3) transofrmation promoted (examples Chick Farm and Heritage enterprises involved in processing and maketing of rice and vegetables respectively (see project presentation for photos); (4) increased access to seed and fertilizer through linkage between rice POs and the national agency for fertilizer distribution in the country and (5) increased income generation (GMD 12,0 million generated from fertilizer sale and more than GMD 4.0 million generated from Berefet Women's gardens (being one of 33 NEMA gardens) and GMD22,542,309.3 (over \$400,000) in 2019 from 16 gardens.

#### D.1. Physical targets and output delivery

#### 42. Watershed Development

- 43. Under component 1 on watershed development there were 6 expected results. At the project completion stage, 4 out of 6 were achieved and largely surpassed. The outcomes in which NEMA achieved the targets are as follows:
- 44. The targeted area of land to be managed under climate resilient practices was 1,530 ha and NEMA actually developed 1831,5 ha. An extra 301,5 ha was developed which is approximately 49% more land developed and protected from water erosion benefitting 8,409396 households. This means that more mangrove swamps were rehabilitated, more woodlots were established or protected and more areas were put under agro-forestry.
- 45. Under the community watershed management sub-component, the project developed land according to practices resilient to climate change over an area of % of the objectives targeted at the end of the MTR .
- 46. The revised targeted area for upland cropping under control was 3,000 ha and the actual area controlled was 4,630 ha. The target was surpassed by 1,630 ha. The target was surpassed by 54% which benefitted 4 630 households. This partially explains the increase in production of upland crops (maize, sorghum, millet, groundnuts, sesame and cowpeas).
- 47. With regards to soil and water conservation, the project made it possible to cultivate an area of 4 630 ha, which is more than the 3 000-ha revised target at MTR. Runoff. erosion and gully formation, were controlled

with diversion lines and bunds. This was a 154% achievement over the MTR revised target. To achieve this, the project carried out 185 gully plugs, 31,680 m of inter-village roads, 23,200 m of access roads to fields, and 18,650 m of diversion works.

- 48. At Project completion, the project protected 12,733 ha of lowlands which is approximately 102% of the initial 12,400 ha targeted and 221% of the revised 5760 targeted at MTR. Again, it partially explains the surpass in the production estimates but more importantly, the number of households targeted to benefit from this intervention reached 25,448 households which alone is more than the project outreach of 23,560 households.
- 49. The project reached 16 000 farmers through Farmer Field Schools (FFS) established for training on Good Agricultural Practices (GAP) and Climate Change (CC). The initial target was 20,000 farmers, and so, the project reached 78% of the MTR target. The outcome is an increase in capacity and improvement in crop husbandry techniques. Again, this partially explains why both production and productivity of rice and vegetables increased
- 50. Land development for rice cropping have been achieved in two ways including tidal irrigation schemes and lowland rainfed rice perimeters:
  - The tidal irrigation scheme consists of the creation of water inlets with one or more steel gates, which will allow the introduction of the volume of water necessary for the irrigation needs of the rice fields. Thus, the rice plots will be irrigated by controlled submersion during the period of high tide or rising floods. From this water inlet, a main channel is built which supplies secondary channels. Then, secondary canals serve tertiary canals which irrigate the plots with sections of PVC pipe. The tidal irrigation scheme is completed by an anti-flood dike whose role is to protect the plots against flooding and also a drainage system to evacuate excess rainwater or for harvesting or other cropping operations. Movement inside fields between plots and along canals is ensured by the creation of a network of internal access roads. Tidal irrigation scheme also requires the construction of punctual concrete crossing structures at the intersections of roads and irrigation or drainage canals.
  - In the other lowlands, the civil works involved protective or retention dikes for fresh water and/or anti-salt dikes fitted with 10-meter spillways, causeways, access roads to the fields as well as bridges to cross the flow beds of the water.
- 51. The rice cultivation was done on an area of 431.5 hectares for tidal irrigation and 12,733 ha for lowlands rice. This represents completion rates of 53% and 221%, respectively considering the revised target at MTR. In the tidal irrigation schemes, the project built 5,210 m of main canals and 17,710 m of secondary canals. To facilitate plot access and fields access from villages, the project built 17,970 m of roads inside the perimeters, 12,020 m of main access roads to the perimeters. To evacuate excess water and protect the irrigated area, 15,580 m of drainage canals and 16,330 m of flood protection dyke were built. All the perimeters were equipped with water inlets (sluice gates) to control water coming in and draining out of the fields.
- 52. In the lowlands, the project constructed 32,270 m of causeways to improve access to rice fields, the drying of paddy and the extension of cultivated areas. In total, 3,810 m of anti-salt dike were built to protect the land against intrusion by seawater during high tides. Also, the project built 69,852 m of dike equipped with 185 weirs and 61 bridges.
- 53. NEMA failed to reach the set targets for the following outcomes:
  - The revised target area at MTR for tidal irrigation scheme was 810 ha but the actual area developed is 431,5 ha which is just 53% achievement. The completed schemes are benefitting 844 households. The causes of delay can be explained by the slow start of the procurement process and the lack of capacity of local contractors. A non-NEMA problem, nonetheless worthy of mention, is the question of the safety of the women at the rice perimeters from invading hippopotamus. The problem needs to be addressed at the government level between the Ministries of Agriculture (MOA) and Environment, Climate Change and Natural Resources (MECCNAR).
  - The revised target at MTR for vegetable garden schemes was 240a but at project completion only 165 ha were achieved. The project achieved 69% of the target. The unachieved 31% are partially completed works which were suspended when it was realized that they could not be completed before project completion. The plan was to develop 70 vegetables, approximately 5 ha each, but by project end, only 33 gardens were operational.
- 54. A total area of 165 ha of vegetable gardens was built and equipped with solar-pumped boreholes. Each garden was provided with a 6-inch borehole that can provide 200 m3 per day; a 60,000-liter water tank raised 5 meters above the ground; 20 ground basins of 8 m3 volume; a 900-meter perimeter fence; one building serving as an office and storage and another building for a toilet. In some gardens drip irrigation system was introduced with polyethylene pipes fed by valves for every ¼ hectare. There are a number of 17 gardens that have not been fully completed since the project didn't launch the procurement relating to the drilling, elevated reservoir and the network of pipes to supply the ground tanks. For these gardens only the building and the toilets, the fence and the ground tanks were completed.

#### Agricultural Commercialization

- 55. Component 2 of the NEMA project supported the commercialization of rice and horticultural produces from the gardens/rice perimeters developed in Component 1 of the project. Among the 5 results identified in the Appraisal Report, 4 targets were achieved or surpassed.
- 56. The project surpassed the number of Farmer Organizations/Water User Groups created and involved in group sales using the Market Information System (MIS) developed by NEMA. The revised target of 90 FO/WUG was increased almost 600% to 530.
- 57. The Rural producers' organizations engaged in formal partnerships/agreements or contracts with public or private entitled were target at MTR at 30. The project reported at completion 24 organizations equal to 80% of the revised target.
- 58. The number of markets constructed or outlets set up was targeted at 10 but NEMA constructed 2 markets whilst setting up 60 outl
- 59. The farm-to-market access roads to be constructed was targeted during the MTR at 50 km and at project completion NEMA constructed 75.68 km of road. The beneficiaries, especially the women, appreciate these access roads and causeways. Before the intervention of NEMA, it took them hours to reach their fields. After NEMA, access to the rice fields has been strongly facilitated, reducing their time to access the fields.
- 60. The youth inclusion revised output target was also achieved. The revised target was to support 100 youths to start a business and this was achieved. The support given was mostly processing and transformation of produce to add value, extend shelf life, avoid gluts and exploit market windows.
- 61. The only target that component 2 did not achieve is the number of enterprises/ farmer organizations supported for business developmen The revised target was 210 enterprises/ farmer organizations but NEMA, at the project completion, could only support 172 enterprises, mainly in the rice and vegetable subsectors.
- 62. Another reason to explain the underachievement is that the budget allocated to the CISF/matching grants was underestimated: (1) The project supported some beneficiaries in acquiring big money items such as tractors and (2) the MTR revised the policy by increasing the share of NEMA matching grant from 45% to 60% without the corresponding increase in the budget line item of the CISF/matching grants.

#### **D.2. Rural Poverty impact**

The project has had a significant contribution to reducing rural poverty in the project target area or beyond. It has effectively reached out to large numbers of poor rural women and men, exceeding targets. The rural poor, and their communities, have significantly benefited from project implementation and their incomes or livelihood means have improved significantly as a result of their participation in project activities.

- · increases in incomes for producers, as recorded above
- · reduction in food insecurity gains recorded above
- strengthened social capital and capacity among project beneficiaries
- · increased number of rural enterprises created

• the creation of Producer Organizations, MIS and the AVIP promote linkages to markets and thus increasing market efficiency and profitability of rice and vegetable production

- · increases in productivity of rice and vegetables as recorded
- · increases in the adaptive capacities of producers to climate effects
- · All of the above together have a combined positive effect on overall poverty reduction for beneficiaries

#### **Project outcomes and impacts**

63. The project aimed at contributing to poverty reduction amongst women and youth in terms of household food security, asset acquisition and employment creation. According to the end-line study results, household food security improved significantly and translated to reduced seasonal hunger periods (first hunger season reduced from the baseline values of 2.8 months to 1.2 months while the second hungry season decreased from 2.9 months to 0.9 months). There has been positive impact on productive asset acquisition for women. Small ruminants and poultry

ownership increased during the project period from baseline values of 79% for poultry, 35% for sheep and 57% for goats to 86%, 47%, and 62% for poultry, sheep and goats respectively.

- 64. The project investments in the lowland and upland vegetable gardens schemes also contributed to improving the livelihood of the target beneficiaries and generating incomes. In the rice rain-fed developed schemes, a total of 25,466 women recorded an annual income of at least USD163 representing105% achievement over the end project target (12,400). In the tidal irrigation schemes, there has been moderate impacts where 38% of women recorded an annual income of at least USD 826.
- 65. Developments in vegetable production and other value addition initiatives in the matching grant subcomponent resulted in a total of 5 742 women recording an annual income of at least USD 826 from vegetable production and surpassed the end target (4,800) by 20%.
- 66. Youth employment also increased with a total of 344 fully employed as a result of the project agriculture support services and contributed to curbing illegal migration.
- 67. Although child malnutrition remains a challenge in the project intervention areas, the introduction of bio-fortified crops in the vegetable gardens and nutrition education (cooking demonstrations at communities using mothers' clubs) to support diversified food consumption improved better nutrition education and had a potential to effect on maternal nutrition as well as spill over on household members especially children and adolescence in later years.
- 68. There is a commutative complementary positive effect of the project components in alleviating poverty at the household level generally. A total of 4,630 beneficiary households representing 15% above the end project target of (4 000) achieved an increase in income of at least 15% from upland crop production resulting from the upland watershed management and erosion control support. In addition, a total of 8409 households had their climate resilience increased by at 15% due to ASAP activities in the CHOSSO. **Overall, 37,234 rural people experienced changes in their economic status (+10% or more) including income, consumption, wealth, food diversity and nutrition.**
- 69. Concerning the project outcomes, there is an increase trend in production and productivity in the developed scheme with 81% reporting increase in production, although there are rooms for improvements in technical support and farmer-based management systems. There are productivity increases in the main crops grown in the project developed areas. For example, in lowland rain-fed swamps, rice yields increased from 0.7 tons/ha to 2,5 t /ha while in the tidal rice schemes, yields increased from 1.5 t/ha to 3.5 tons/ha.
- 70. Positive trends are also visible in vegetable production with yields increasing in the project areas from 0.8t/ha to 30t/ha for tomatoes, and 0.7t/ha to 30t/ha in the case of onions.

#### Targeting and outreach (Gender Equality)

- 71. At project completion the project has reached a total of 45 968 households, while the project initially planned to reach 29,429 households (23,560 households for NEMA + 5,869 households for Chosso (90% of the 6,600 households identified as 10% are overlapping with NEMA).
- 72. The project has reached out to its intended target groups, as identified in the Project Design Document the project has also exceeded quantitative outreach targets. The assumption was made that the number of persons per household is one explaining the one-to-one ratio household, person reached by the project.
- 73. The endline survey shows a gender distribution of 51% beneficiaries for women and 49% for men, with 23,444 women and 22,524 men reached during project implementation. Women are particularly well represented in rice and vegetable activities with: (i) 25 466 women reporting an annual income of at least 163 USD from rainfed lowlands under the land and water management practices; (ii) 5,742 women recording an annual income of at least USD 826 from vegetable production.
- 74. Women represent more than 80% of persons trained in production practices and technologies (6,270 women in 33 vegetable gardens and 4010 women from farmers' fields schools) 5,226 youths were trained under this activity. Women accounted for 51% of the functional literacy program accounting for around 2,510 women.
- 75. Youth participation is also high in rural with 100 youths in leadership position in rural enterprises accessing business development services for a total of 172 (40 CISF, 85 GYIN youth ,33 NEMA gardens, 6 POs rice,8 AVIP), 60 women are in leadership positions in these enterprises against 110 men.

#### i) Household income and assets

76. **Satisfactory**. The project has generated a substantial increase in the incomes and physical and financial assets owned by rural poor women and men and these increases were generally in excess of targets. Such impact is well measured, quantified and documented.

- 77. The RIMS Endline Report compared with the RIM Baseline figures records increased household asset holding among project beneficiaries, with strong highlights on women. Among the key assets covered in the study, the proportion of households reporting ownership of radio and mobile telephones during the project endline period stands at more than 92% and 97% respectively. Compared to baseline values of 79% and 89%, it can be inferred that higher numbers of beneficiaries have invested in assets related to information and communication. Similarly, the proportion of households reporting access to electricity, refrigerators and animal drawn carts stand at 37%, 18% and 65% respectively. Ownership of poultry, sheep and goats, which are predominantly owned by women have recorded significant increases: poultry increased from 79% at baseline to 86% at endline, sheep from 35% to 47% and goats from 57% to 62%.
- 78. Key matching grant beneficiaries (Tractor owners at Massembeh and Sabach Sukoto, the Solar irrigated garden at Mandinaba, Chilli processing factory at Bakau, etc have demonstrated income increase effects, creating jobs and improving their livelihoods (constructed new homes, etc).
- 79. Analysis of the asset categories in the said Impact Survey Report suggest that the project has had a positive effect on investments in assets for increased access to information, communication, electricity, storage and transportation. It is important to note that these assets have the potential for significant contribution to revenue and income generation along the key agricultural value chains of the project: rice and vegetables.

#### ii) Human and social capital

- 80. **Satisfactory**. The capacities of poor rural women and men have been greatly developed and enhanced and their organizations and communities greatly strengthened by the project. The poor and vulnerable, or their organizations, now have a voice and they can influence policy making or gain access to essential social and productive services. A strong social capital was created that will help ensure post-project sustainability.
- 81. An International Expert and WARF were recruited with support from IFAD to assess the capacities and structure of the Village Farmer Associations (VFA). It is the outcome of this study that the project formed beneficiaries into groups (6 rice POs, 6 Vegetable POs and 12 Agricultural Value Chain Interaction Platforms (AVIP) which are all operational.
- 82. These groups now are: (1) promoting group sale and use of market price information system which enables greater bargaining power and fair pricing; (2) linkages promoted between producers and off-takers (private enterprises) with contractual agreements reached through value chain financing; (3) transformation promoted (examples Chick Farm and Heritage enterprises involved in processing and marketing of rice and vegetables respectively); (4) increased access to seed and fertilizer through linkage between rice POs and Gambia Groundnut Council, the national agency responsible for fertilizer sales distribution in the country.

#### iii) Food security

- 83. **Satisfactory**. The project generated a substantial increase in the food security of rural poor men and women, in excess of targets
- 84. The project succeeded in increasing food security for its beneficiaries by reducing the number of food insecure households from 384 at baseline to 283 at endline and duration of the hungry season from 2.8 to 1.2 months (Impact Survey Report, 2019).
- 85. The community of Barajally Suba, which benefitted from a new tidal irrigation scheme, reported that they have met their food needs for a year from just one season of production!
- 86. Vegetable growers are promoting consumption of nutritious foods and using Mothers Clubs to promote hygiene and child care.

#### iv) Agricultural productivity

87. **Satisfactory**. Project activities have led to a substantial increase in agricultural productivity or production in the project target area. Such increase is well measured, quantified and documented and exceeds targets.

- · Swamp rice yields: 2.5 t/ha against 0.7 t/ha at baseline and 1.8 t/ha target
- Tidal rice yields: 3.5 t/ha against 1.5 t/ha at baseline and 3.25 t/ha target per season
- Tomato yields: 30.0 t/ha against 0.8 t/ha at baseline and 9.0 t/ha target (18 t/ha youth)
- · Onion yields: 14.0 t/ha against 0.7 t/ha at baseline and 8.0 t/ha target (16 t/ha youth)

#### v) Institutions and policies

- 88. **Satisfactory**. The institutions/organizations supported under the project are self-managed, transparent and without political interference, but they still require support. Services to clients/members are likely to continue after project completion. The project has also managed to influence the policy or institutional framework (changes in important regulations).
- 89. 6 rice POs, 6 vegetable POs and 12 AVIPs formed / strengthened with relevant group management and governance mechanisms for self-management, transparency and without political interference.
- 90. A National Women's Producers Apex Cooperative has been formed and strengthened to participate in and influence policy dialogue. These producer organizations are linked to NACOFAG, which is the national consortium of farmers in the country, for continued guidance, mentorship and support.
- 91. The project has supported the development of a National Rice Strategy, National Extension Policy and revitatalization of the National Climate Policy and Committee. The project has led the successful development and validation of the COSOP (2019-2024) which outlines the key government priorities for collaboration with IFAD over the period, beginning with the signing of financing for a follow up project to NEMA, ROOTS

#### vi) Access to markets

- 92. **Satisfactory**. There is a substantial increase in farmers' physical access to markets or in their access to market prices and information. They have significantly increased their bargaining power over traders and their access to quality inputs. The project has also significantly enhanced the capacities of rural producers' groups.
- · The project constructed 2 market buildings
- The project constructed 78.25KM of access roads to link production fields to markets and other social amenities.
- · The project created the AVIP and MIS to promote access to markets

• The project's POs are adopting group sale approaches which is strengthening the bargaining power of producers and increased access to inputs (seed and fertilizer).

#### D.3. Gender equality and women's empowerment

- 93. **Highly satisfactory**. Project made a significant contribution to gender transformation, addressing all three gender policy objectives and engaging in policy dialogue. Gender issues were addressed by project, and both women's and men's situation improved as a result. Women accounted for a substantial number of beneficiaries. Procedures and resource allocations were appropriate. Gender-related impacts are likely to be sustainable.
  - Women comprise more than 70% of the 45,968 beneficiaries served by the project;
  - Women form the majority of rice and horticulture producers (more than 80%);
  - Women have been carefully targeted for group leadership
  - - Project won recognition by IFAD for the Best Gender Awards (2019) in which event Amie Bah and Fatou Secka participated and showcased the project initiatives around gender.
- 94. In short, Project made a significant contribution to gender transformation, addressing all three gender policy objectives and engaging in policy dialogue. Gender issues were addressed by project, and both women's and men's situation improved as a result. Women accounted for a substantial number of beneficiaries. Procedures and resource allocations were appropriate. Gender-related impacts are likely to be sustainable

#### D.4. Adaptation to climate change

- 95. The project has supported the development of a National Rice Strategy, National Extension Policy and revitalization of the National Climate Policy and Committee, the promotion of compost chambers for organic production and increased access to organic fertilizer, and maintenance of soil fertility, Climate Adaptation Curriculum developed for rice and vegetable producers, Resilience Profile Analysis (baseline and endline survey) produced to measure the evolution of resilience levels among project beneficiaries using the FAO SHARP (Self-evaluation and holistic assessment of climate resilience of farmers and pastoralists) tool.
- 96. In addition the project supported the development of:
  - forest enrichment which the Department of Parks and Wildlife and Forestry is keen to replicate as well as the Ecosystem-based Adaptation Project funded by UNEP.
  - Community Woodlots and Agroforestry, with provision of tools/equipment for tree nursery development and bush fire control.
  - Climate Games which are a tool to mainstream adaptation through participatory exchanges among stakeholders and is capable of adapting climate change to agricultural value chain development.
- 97. The Performance was assessed as moderately satisfactory. There has been some improvement in the resilience of local communities vis à vis climate-related shocks and stresses. These communities were empowered to mitigate some negative effects of climate change and/or capitalize on some new opportunities emerging in a changing climate, but much more needs to be done.
- · The Climate Adaptation Curriculum for producers of rice and vegetables

• Trainings on the importance of environmental natural resource management exemplified in initiatives such as Mangrove restoration, Community Woodlots and Agroforestry

· Provision of tools/equipment for tree nursery development and bush fire control

· Climate Games is a tool to mainstream adaptation through participatory exchanges among stakeholders and is capable of adapting climate change to agricultural value chain development.

#### D.5. Environment and natural resource management

- 98. The project's ASAP initiatives include: Woodlots, Agroforestry and Mangroves, Climate Games for awareness raising, Climate Adaptation Curriculum for rice and vegetable producers altogether promote sustainable natural resource management, including adoption of sustainable land and water management practices.
- 99. NEMA interventions in land development have reclaimed productive land (12,733 ha in lowland, 4,630 ha in upland conservation and 431.5 ha in tidal irrigation) and strengthening the resilience of soil for increased productivity. The project has developed an Environmental and Social Management Plan (ESMP) which was monitored throughout the project implementation by the National Environment Agency. This helped to promote sustainable environmental, social and natural resource management.
- 100. In response to a request from the Ministry of Environment Climate Change and Natural Resources (MECCNAR), the NEMA Chosso project annually joins the Gambia's National delegation to attend the UNFCCC Conference of Parties(CoP). During the CoP, the high-powered delegation, normally headed by the Minister, engages in the highest level of international dialogue for climate change and to follow up on implementation of the Paris Agreement. The Nema Chosso project representative is normally assigned to follow the proceedings of the Koronivia joint work on Agriculture, where countries work together on agricultural development to ensure increased food security in the face of climate change as well as reduction in emissions. The joint work specifically addresses soils, nutrient use, water, livestock, methods for assessing adaptation, and the socio-economic and food security dimensions of climate change.
- 101. Upon return from the mission, the project representative is required to work very closely with the National UNFCCC focal point and other stakeholders, to prepare a national report for submission to The National Climate Change Committee and relevant policy makers. The Nema Chosso project over its lifetime partcipated in CoPs 22 to 25.
- 102. At National level, the Chosso project initiated the revival of the national Climate Change Committee in 2016 after many years of dormancy. The 2 day meeting was an opportunity for to update stakeholders on the status of the national climate change agenda and to revisit the mandate of the National Climate Change Committee. In 2017, following the adoption of a new National Climate Change Policy, the project also financed the setting up of both national and subnational structures(as per the policy's recommendation) in order to ensure its effective rollout.

- 103. **Satisfactory**. The environment or the natural resource base have improved in the project target area. The pressure on the natural resource base has been reduced and the natural resource base is now used in a more sustainable manner. High-standard environmental norms were followed for most project activities and there was no negative impact on the environment.
  - The project's ASAP initiatives: Woodlots, Agroforestry and Mangroves, Climate Games for awareness raising, Climate Adaptation Curriculum for rice and vegetable producers altogether promote sustainable natural resource management, including adoption of sustainable land and water management practices.
  - NEMA interventions in land development have reclaimed productive land (12,733 ha in lowland, 4,630 ha in upland conservation and 431.5 ha in tidal irrigation) and strengthening the resilience of soil for increased productivity.
- 104. The project has developed a Environmental and Social Management Plan (ESMP) which was monitored throughout the project implementation by National Environment Agency. This helped to promote sustainable environmental, social and natural resource management.

#### D.6. Targeting and outreach

105. **Satisfactory**. The project has effectively reached out to the intended target group(s) and has exceeded quantitative outreach targets, as demonstrated by clear and reliable information on beneficiaries. Concrete and effective targeting mechanisms were used during implementation. Targeting performance was pro-actively monitored and, when needed, corrective measures taken.

· By virtue of the project being demand driven nature, a criterion for request for assistance was developed which was used as a basis for targeting of key interventions.

· As Evidently indicated above outreach target was sufficient reached (target exceeded).

 $\cdot$  The project strongly focused its interventions on the target group (women and youth) and this is evident in the composition of beneficiaries reached by the project where more than 70% of beneficiaries (rice and vegetable growers) are women.

• The project target is explicitly defined in the project design document and this was used by the project to guide beneficiary selection.

#### **D.7. Innovation**

- 106. The NEMA project completion mission identified several good practices considered as innovative actions in terms of implementation approaches, new technologies or organizational, institutional or financial innovations, offering significant potential for scaling up. Five replicable innovation have been identified in the annex (2) Innovation Tables. One of them is the Agriculture Value Chain Interaction Platform establish in 2017. With major achievements in the delivery of key outputs of NEMA, attention increasingly turned to the outcomes of the investments and their effects on the lives and livelihoods of the beneficiaries. In this respect, key questions and issues that need to be addressed included:
  - How sustainable are the results of the project initiatives?
  - How effective has the project been in terms of achieving its desired results?
  - To what extent are the initiatives functional and operational?
  - How are the initiatives contributing to improved incomes among beneficiaries?
- 107. It was the project's conviction that positive responses to these questions would largely determine the achievement of the key project outcomes. In this framework, it was important to highlight that weak linkages between producers and other actors of the key agricultural value chains supported by the project remained a major challenge to the achievement of NEMA target outcomes. Segmented and poorly performing agricultural value chains were constraining the transformation of project actions and outputs into tangible outcomes with lasting effects on the livelihoods and lives of beneficiaries. This challenge needed to be addressed to overcome persistent problems of low productivity, limited access to agricultural inputs and financial/non-financial services, inadequate transformation, poor quality agricultural products and limited access to markets.
- 108. The underlying theory of change for AVIP initiative was that functional and operational interaction platforms in NEMA's intervention zones in The Gambia would trigger the emergence of profitable and sustainable agricultural value chains that would contribute to 'reduced poverty of rural women and youth' and 'increased incomes from improved productivity based on sustainable land and water management practices'.

## D.8. Scaling up

- 109. WARF had partnered with GYIN in a two-year pilot initiative to facilitate the emergence of 12 operational, functional and sustainable rice (3 Pakalinding in LRR, Boiram and Kudang in CRRS) and horticulture (Darsilami and Berefet in WCR, Pakalinding and Jarra Madina in LRR, Noo Kunda and Berending in NBR, Nanaba and Saruja in CRRS) value chains at selected NEMA intervention areas. Taking advantage of GYIN's experience in local press communications and social media, WARF drew from its experience in knowledge management and communication to document the successes and lessons from the initiative as well as promote the project's visibility at the national and regional levels.
- 110. The main action focused on the creation of agricultural value chain interaction platforms (AVIP) linking youth and women beneficiaries of NEMA interventions to key value chain actors, with coaching, mentoring and limited value chain financing to ensure that they are operational, functional, profitable and sustainable. The platforms act as the principal mechanism for interaction, negotiation, mutual learning and contractual arrangements between the value chain actors. Capacity strengthening support was provided to the platform to ensure operationalization and sustainability of the interactions. Initial value chain financing will be provided to each platform through the project's matching grant mechanism.
- 111. The emergence of operational and functional AVIP will contribute directly to the achievement of project outcome 1 (Improved productivity of scarce agricultural lands), outcome 3 (Value chain actors participate in local and national markets in a profitable way) and outcome 4 (Producer organizations accessing financial and non-financial services in a sustainable way).

#### 112. Key results

- 113. OBJ1: Established 12 functional, operational and profitable agricultural value chain interaction platforms linking NEMA beneficiaries to key actors of rice and horticulture value chains in proje intervention sites in WCR, LRR, NBR and CRRS. Boiram and Kudang producers were linked to Chick Farm for purchase of paddy which was then processed and bagged and labelled in The Gambia. Heritage which was supported through the Matching grant had signed up contractual agreements with several NEMA gardens for purchase and processing of chilli pepper.
- 114. OBJ2: Created 15 new rural agri-businesses over 2 years, providing full-time employment for 90 to 100 rural youths and women members of selected rice and horticulture value chain interaction platforms (production, transformation and marketing). The partnership with GYIN has resulted to the creation of an overall 100 youth led/managed enterprises and at least 200 full time employment opportunities (an average 2 per enterprise).
- 115. OBJ3 : Provide value chain financing to promote access to agricultural capital and resources for 15 agro-enterprise members of the interaction platforms. The 15 enterprises (mentioned in OBJ 2 above) are youth owned/managed and received the matching grant support accompanied with training, coaching and mentorship services through GYIN.
- 116. OBJ4: Once the AVIP experience is consolidated and upscaled in the ROOTS Project, a model for sustainable agricultural value chain development in The Gambia will be developed and disseminated for public use.

#### 117. Key challenges

118. Farmgate Prices charged by producers were considered too high thus rendering the contractual agreements unsustainable. This challenge was expressed by ChickFarm and Heritage experiences.

#### 119. Key lesson learned

- 120. Criteria to access the Matching Grant directly affected the emergence of youth-led/managed enterprises. The revision of the Matching Grant from 45%:10%:45% at project design to 60%:40% post MTR, in addition to capacity building, coaching and mentoring services were critical for increased access to and sustainability of agribusinesses.
- 121. Having in place a governance mechanism including an arbiter or price control and management of contracts was critical to sustainable partnerships between producers and buyers.
- 122. In terms of innovation and the potential of scaling up, the project is considered as satisfactory.

#### E. Assessment of project efficiency

123. **Moderately Satisfactory**. Project implementation was somewhat efficient. Some project activities were implemented with delays or exceeded anticipated budget and the internal rate of return was lower that he one calculated at design

stage. Project implementation arrangements and procedures were not all efficient and output delivery was sometimes problematic.

- 124. The project remained a financially and economically viable and attractive investment, with the EIRR stabilized above the 10% discount rate. Project implementation arrangements and procedures were efficient and output delivery was non problematic with good achievements as indicated above in effectiveness.
- 125. PSU was stable throughout the 7 years (no attrition). Yearly staff appraisals were conducted and wanton staff encouraged to step up. This Is manifested in the ARs 2017 to 2019.
- 126. Since the start of project, 18 months procurement plan was adopted, positioning the project to avoid delays. Pre-Bid meeting and training were provided to enterprises, giving them opportunity to decide whether to participate or not.
- 127. Aside from the non-functionality of the GANAD an office level system was installed which can be improved to cater for ROOTS needs. Knowledge management (KM) and M&E has worked closely to develop the Nema KM Strategy which has performed very well in terms of achieving planned activities (such as sensitization, development of Knowledge products, exchange visits, farmer trainings, sign-boards, News Letters to name a few).

#### E.1. Project costs and financing

- 128. During the seven (7) years of project implementation, the total amount disbursed was 37,610,073.6711 USD, all sources of financing combined, i.e., an effective rate of mobilization of financial resources of 95.43% compared to the total resources planned. by donors. At the closing date, the total expenditure made by the program amounts to approximately 92.71% which is equivalent to 34,876,920 USD.
- 129. The initial cost of NEMA. At project design, the total costs for the project were estimated at USD 65.00 million, to be jointly financed by IFAD through two grants amounting USD 34.5 million (53.0% of the estimated project cost), a concessional loan of USD 15.0 million (23.1%) from Islamic Development Bank (IsDB), further financial contributions from one or more other development partners of USD 11.8 million (18.2%), GoTG contributions of USD 2.6 million (4.0%), Participating Financial Institutions and beneficiaries contributing USD 1.2 million (1.8%). The Government financing were mobilized mainly from its budget (USD 0.63 million, comprising some office operating costs and the basic emoluments of seconded junior civil servants) and from taxes and duties foregone (USD 1.99 million).
- 130. Funding mobilized and Revised Cost of the Project. For its implementation, NEMA benefited of the following financing: IFAD, IsDB, AFDB, ASAP Trust Fund, the Government of Gambia, beneficiaries and Domestic Financing institutions. On this basis, the project cost has been reassessed at USD 76.59 million. It was distributed among IFAD, with two grants and one loan totaling (USD 34.5 million), the IsDB (USD 15.0 million), AFDB (USD 17.7 million), Government (USD 2.8 million) Beneficiaries (USD 0.7 million) and DFIs (USD 0.95 million).
- 131. Disbursements by Financiers. At Project completion, the effective disbursement rate of the IFAD Loan/Grant was 95.43% of the resources in USD. The level of disbursements on IFAD resources is moderately satisfactory compared to other IFAD disbursement profile. The rate of disbursement on the Counterpart Funds (including taxes) corresponds to 77.59% of the revised forecasts of the financial participation of the Government. The financial participation of beneficiaries and DFI is respectively 24.10% and 73.69% compared to DCP forecasts.

#### 132. Summary of Disbursement by Financier as of 31/10/2020 (in USD)

Source of Funding	Approved Allocation USD	Disbursement to Project USD	Disbursement rate %
IFAD Grant-Original	20,279,999.00	18,661,559.08	92.02
IFAD Grant-Additional	7,065,766.00	6,993,693.28	98.98
IFAD Loan -New	7,065,766.00	6,992,928.82	98.97
IFAD ASAP-Grant	5,000,000.00	4,961,892.49	99.24
Total IFAD	39,411,531.00	37,610,073.67	95.43

Grand TOTAL	43,887,137.67	40,679,586.27	92.69
Lenders	954,292.67	703,177.47	73.69
Beneficiaries	684,065.00	164,862.22	24.10
GoTG	2,837,249	2,201,473	77.59

133. **Financial Performance of NEMA**. The breakdown of actual expenditure by component is as follows: (i) Watershed Development (88.35%); (ii) Agricultural Commercialization (88.57%); and (iii) Project facilitation (116.933%). It appears that the expenditure of the component 3 is extremely high and affected the efficiency of the projec Several factors explain the overrun recorded by component 3: (i) budget deficit contributed by non-reduced expenditure in the activities of staff training, special advice, staff salaries and strategies development project did not use the required accuracy in carrying out the budgeting; (ii) low budget allocation from appraisal and this was addressed through reallocation of funds in 2018; and (iii) the NEMA head office was refurbished from this component in 2015 which was not initially planned.

#### 134. Summary of the financial Performance by component as of 31/10/2020 (in USD)

Total	43,887,158	40,4733,753	92.22
C.3. Project facilitation.	5,866,315	6,859,633	116.93
C.2.Agricultural Commercialization	10,083,620	8,931,410	88.57
C1. Watershed Development	27,937,223	24,682,710	88.35
Description	Budget	Actual	%

135. Reallocation of IFAD initial Grant resources. IFAD's initial allocations by category focused on Civil Works, Vehicles, Goods, and Equipment (60.00%), Training, Monitoring, and Evaluation (10.34%), Technical Assistance (6.39%), Staff Salaries (4.71%), Fund (2.43%) and Operating costs (1.06%). The Government of Gambia and the NEMA PSU requested a reallocation of funds from IFAD on December 10, 2018, a request that was approved on February 21, 2019. It has always been given priority not only to the « Civil Works, Vehicles, Goods, and Equipment » but also to the « Training, Monitoring, and Evaluation » categories which saw an increase of more than 10% and 2% respectively each. However, the categories « Technical Assistance » remained constant. However, the categories « credit guarantee funds and training » have seen a decrease of 50% and 1% respectively.

#### 136. IFAD original Grant Reallocation Table in USD as of 31/10/2020

ltem #	CATEGORY DESCRIPTION	ALLOCATED	%	Proposed Reallocation	Final Reallocation	REVISED %
1	Civil Works, Vehicles, Goods, and Equipment	7,900,000.00	60.0	1,363,806.01	9,263,806.01	70.45
2	Technical Assistance	840,000.00	6.39	0	840,000.00	6.39

Item #	CATEGORY DESCRIPTION	ALLOCATED	%	Proposed Reallocation	Final Reallocation	REVISED %
s	Training, Monitoring, and Evaluation	1,360,000.00	10.34	252,647.69	1,612,647.69	12.26
4	Fund	320,000.00	2.43	92,104.07	412,104.07	3.13
5	Staff Salaries (Allowance)	620,000.00	4.71	165,752.06	785,752.06	5.98
6	Operating Cost	140,000.00	1.06	95,690.17	235,690.17	1.98
7	UNALLOCATED	1,970,000.00	14.98	(1,970,000)	0	0
	Total	13,150,000	100	0.00	3,150,000.00	100

137. The reallocation is indicated in the following table

# 138. IFAD add Loan/Grant Reallocation Table in USD as of 31/10/2020

# item	CATEGORY DESCRIPTION	Initial Allocation	%	Proposed Reallocation	Final Allocation	%
1	WORKS	3,535,000.00	70.35	498,632.61	4,033,632.61	80.27
2	CONSULTANCY	60,000.00	1.19	50,610.58	110,610.58	2.20
3	TRAINING	450,000.00	8.95	(50,379.65)	399,620.35	7.95
4	CREDIT AND GUARANTEE FUNDS	145,000.00	2.88	(72,500.00)	72,500.00	1.44
5	SALARIES AND ALLOWANCES	290,000.00	5.77	30,487.41	320,487.41	6.38
6	OPERATING COST	45,000.00	0.90	43,149.05	88,149.05	1.75
7	UNALLOCATED	500,000.00	9.95	(500,000)	0	0
	Total	5,025,000	100	500,000	5,025,000	100

139. The reallocation operation allowed NEMA to contain all project expenses in their appropriate categories

#### 140. [1] IFAD Grants/ loan and ASAP trust Fund

#### E.2. Quality of project management

#### i) Procurement

- 141. The procurement process was performed as stated in the Letter to the Borrower. The procurement rules applicable for NEMA CHOSSO were the national ones detailed in the Gambia Public Procurement Act, except for the procurement of technical assistance and community-based procurement, which had to follow IFAD guidelines.
- 142. All procurement activities under the project were managed by the Project Management Unit under the supervision of the CPCU (MOA), with implementing agencies providing necessary technical specifications, bills of quantities and terms of reference. Bids were evaluated by MoA Contracts Committee (MCC), composed of 12 members headed by the MoA Permanent Secretary, with selected PSU staff (generally the Project Director, the Procurement Specialist and sometimes the Financial Controller) also participated in the meetings, but only as observers. Contracts were approved in line by the GPPA and IFAD had given prior "no objection" clearance in the normal procurement process.
- 143. All bidding documents for the procurement of goods, works and services were prepared by the implementing agencies with the participation of PMU specialists as required, and the procurement documents would be cleared by the MOA Contracts Committee before any action is taken.
- 144. The project kept an up-to-date procurement plan that shows the particular contracts required to be carried out annually. The plan provided information about the procurement of goods, works and services, how vendors will be chosen, what kind(s) of contract(s) will be used, how vendors will be managed, and who will be involved at each stage of the process.
- 145. The procurement process can therefore be assessed as fully compliant to the approved rules and regulations in terms of due process, equal treatment and good governance.

#### ii) M&E and KM

- 146. Overall performance of M&E is moderately satisfactory: The Log frame is capturing the project progress at the outreach, outcome and output level. All the indicators are reflected and the RIMS data has been produced by the project. The Project captured the NEMA Chosso interventions in an Excel sheet, the data is adequate and consistent.
- 147. The M&E was used to plan the AWPB and procurement plan and reported on the project achievements of the previous years. The Project kept track of all the works, goods and consulting services through a contract register to assess the level of achievement and the outstanding balance of the activities to be completed.
- 148. The MIS web base application has been developed; however, the application has not been populated. This system would have facilitated data collection and analysis. It would have allowed data collection and sharing at the field and central level improving the M&E function substantively. The M&E system in it's current form doesn't work in a fully efficient way.
- 149. The Agriculture Sector M&E /GANAD system, initially developed and launched in early 2015 at the national level within the CPCU is not operational. The system would have allowed the MoA to monitor and assess performance of the M&E at the central level.
- 150. In addition, it is important to note that Market Price Information system has facilitated market transparency for farmers.

#### E.3. Quality of financial management

151. Through its implementation period, based on our desk-review, the overall FM arrangement at the Project Support Unit (PSU) level appears adequate and could still be satisfactorily used in meeting the fiduciary requirements of the IFAD as agreed in the project Design Reports. The Finance Unit is adequately staffed, with appropriate segregation of duties. Internal controls (in particular Expenditure authorization procedures) are in place within the PSU. Project accounts are maintained using the FINEX accounting software, and were found to be up-to-date. However, the FINEX system should be upgraded in the following areas: (i) contract management (automated production of contract monitoring forms and commitments schedules); (ii) withdrawal applications (automated and accurate summaries of expenditure, WA schedules showing amounts submitted vs. amount reimbursed by IFAD, designated account reconciliations); and (iv) vouchers (with credit side of accounting entries, as well as exchange rates and equivalent USD or GMD for each transaction).

- 152. Internal audit (IA). Our review of the previous missions' reports indicates that the CPCU IA Unit is understaffed, only 3 reviews of NEMA have been conducted since 2015, with a focus on the verification of payment vouchers. Very limited – if any – work is carried out on internal controls, risk assessment and procurement. In order to ensure an effective and efficient internal audit of the new project, it has been recommended that :(i) the staffing of the IA Unit be increased; (ii) the TOR be revised to cover all MoA projects, specify the periodicity of reviews, and the content of the reports; (iii) an annual workplan be prepared; (iv) the scope of the reviews include internal controls, risk assessment and procurement; and (v) audit reports be issued timely and follow-ups materialized in a memo.
- 153. **External Audit.** Overall, all the audit reports and the accompanying management letter were submitted on time (respecting the deadline of 06/30 / n + 1). Per our review of audit reports for 2019, we noted that Auditor General issued an unqualified opinion and confirmed that the audits were carried out in accordance with the International Standards on auditing (ISAs) and the respective financial statements were prepared in accordance with International Public Sector Accounting Standard (IPSAS) cash basis. However, the AG highlighted an important internal controls issues which need an attention from management. It was noted that the closing audit will be performed by the AG and the preparation is underway.
- 154. Completion and closing operations. These questions are analyzed by: (i) status of the recovery plan for the designated account of the IFAD Loan/grants as well as the ASAP trust Grant and (ii) Establishment of cash forecast for the remaining months and while updating of the recovery plan.
- 155. Progress of the recovery plan for the initial Deposit (Advance) of the IFAD Loan/Grants (NEMA): As of 31/10/2020, the mission noted that the recovery of the initial advance has started since October 2019. It should be remembered that the IFAD Loans/Grants received USD 1,300,000 as an initial advance which has raised to USD 3,173,531 following an increase respectively by USD 700,000 (May 2016), USD 250,000 (June 2017), USD 250,000 (August 2017) and USD 673,556 (May 2020). The recovery of the advance of the Designed Account started with WAREN 24 following the adoption by IFAD of the recovery plan proposed by the project. To date, a total of USD2,999,167.63 has been recovered representing 94.5% of the total amount of the advance. As at 30 June 2020, the balance outstanding to be recovered is USD174,363.37. Based on the Cash forecast plan, three WAs amounting to USD109,052.55 will be submitted leaving a balance of USD50,297 projected balance to be reimbursed to IFAD.
- 156. Progress of the recovery plan for the initial Deposit (advance) of the ASAP Grant: As of 31/10/2020, the mission noted that the recovery of the initial advance began in December. 2019. It should be remembered that the Grant received USD800,000 or 1 as an initial advance which has raised to USD USD1,274,400 following an increase by USD 474,375 (April 2016). The recovery of the advance from CHOOSO Designated Account has started with the WA No9 following the adoption by IFAD of the recovery plan proposed by the project. To date, a total of USD 1,126,561.04 has been recovered representing 88.4% of the total amount. of advance to be recovered. As at 30 May 2020, the balance outstanding to be recovered is USD174,363.37. Based on the Cash forecast plan, three WAs amounting to USD147,813.96 will be submitted leaving a balance of USD75,301.85 projected balance to be reimbursed to IFAD.

#### 157. Analysis of execution of the PP 2014-2019. Review of procurement process:

- 158. The review of the performance of the PPs for different years by the mission indicates significant delays in the procurement process, especially at the stage of evaluating bids and requesting for No objections. it is understood that the Project request for no objection from the GPPA on the first stage before requesting from IFAD hence the reason for the delays.
- 159. Our analysis of the Procurement plan (PP) from 2015 to 2019 indicates that, the year 2016 to 2018 are the best performance of the NEMA project life with an average of 91% rate of execution. Please refer to a summary of the realized rates is presented below. Several reasons can explain the low rate recorded in 2015 such as; the non-availability of a Procurement Officer in the PSU.

#### 160. Table indicating PP Execution from 2014 to Date

Year	2014	2015	2016	2017	2018	2019
Percentage of execution of the PP (%)	-	50%	88%	90%	85%	100%

- 161. During the life span of the project, a total of 80 major contracts were registered. Out of this number, 47 falls under works category, 23 under goods and 10 under consultancy.
- 162. The contract registers and procurement plan available are kept by the Procurement Specialist which take into account the procurements which have been effectively performed by the PSU from 2014 to date. The contract register has been improved as recommended by last November follow up mission and includes percentage of work

completed and payments.

- 163. The recommendations issued by the November 19th 2020 follow-up mission were reviewed with the Procurement Officer and are completed.
- 164. The review of the implementation of the revised PP to date indicates delays in contract implementation due to low capacity of contractors and natural factors such as flood. However, the achievement rates all together are respectively 100% for goods and equipment; works 100.00% showing a slight progression since the last procurement review (works 91.67% and goods 100%). The 8.33% of pending works that were to be completed by 20 December, effectively ended and the others that could not be completed within this time were cancelled (see attached contract register and addendum). The total amount of cancellation represents about 5% of the contracts affected.
- 165. The Procurement team with project staff (engineers, finance) and mission experts carefully reviewed the cancellations to check if the cancellation of works components or those which are cancelled do not affect the aim and functionality of the infrastructures and also if they do not have any financial implication.

#### E.4. Project internal rate of return

- 166. Internal rate of return. At project completion, the NEMA-Chosso invested all of its total funds of USD 39.4 million into the three components: Watershed Development; Agricultural Commercialization; and, Project Facilitation. A Financial and economic analysis has been carried out as part of the PCR process to determine whether the project was financially and economically viable and sustainable to the beneficiaries.
- 167. In line with the Project Design Report (PDR), seven core enterprises were considered and farm budgets developed presenting the costs and revenue for each. The crop budgets were used to determine the cost and benefit streams, together with the areas developed and the investments incurred for NEMA and Chosso (life of the project) were computed and analysed for a 20-year period to determine the Net Present Value (NPV), Financial Internal Rate of Return (FIRR) and Economic Internal Rate of Return (EIRR) of the project.
- 168. The results of the analysis at PCR, show a re-estimated EIRR at 19 % with an NPV of USD 52,
- 169. 338,686.80. This figure is slightly lower than the EIRR of 21.8% with an NPV of USD 54,192,090 realized at appraisal. The project has thus remained a financially and economically viable and attractive investment. The slight decline can be attributed to the delayed completion of infrastructure for both tidal and vegetable schemes inhibiting their optimal operationalization. More importantly, the EIRR also stabilized above the 10 % discount rate (the opportunity cost of capital). Furthermore, only the core enterprises were used, thus a number of enterprises including Upland crops, NRM interventions to mitigate the adverse impacts of climate change were not quantified.
- 170. **Sensitivity Analysis.** Based on the computed EIRR of 19 % derived from the available project database and reviewed literature, a sensitivity analysis (Table 2) was carried out with the purpose of assessing the impact of changes in cost and revenue streams on EIRR base case scenario. The analysis showed five main scenarios: A base case scenario; Scenario 2: a 10% increase in revenue increases the EIRR to 22%, Scenario 3: a 10% decrease in revenue decreases EIRR to 20%, Scenario 4: a 20% increase in revenue increases EIRR to 33% and Scenario 5: a 20% decrease in costs increases EIRR to 27%. These analyses show that the project is quite resilient and can uphold against any myriad of constraints as long as the EIRR is kept above the 10% opportunity cost of capital elsewhere.
- 171. [1] Lowland (rainfed rice), Tidal rice-wet season, tidal rice-dry season, onion youth, onion women, tomato youth and tomato women

#### F. Partners' performance

#### F.1. IFAD's performance (Quality of supervision and implementation support)

- 172. IFAD conducted about 19 missions (designs, supervisions, follow up and support missions); one MTR mission and one completion mission. The joint IFAD/Government supervision and support missions included multidisciplinary teams to cover the technical themes concerned by the project interventions. Support from other experts that IFAD sometimes mobilized outside the supervision missions covered fiduciary aspects, economic and financial analysis, procurement, communication and knowledge management essential to the smooth operation of the project.
- 173. Since the decentralization of IFAD and the opening of the West Africa Hub around 2018, the NEMA project has had the advantage of benefiting from the direct supervision of IFAD and the presence in Dakar of the various Country Directors of the portfolio for close monitoring. Thanks to this proximity, the project has had facilities for the follow-up and processing of its activities in general and the requests for no objection and the withdrawal application of funds in

particular. It also benefited from advisory support from IFAD's fiduciary management team, which enabled it to find appropriate responses to implementation constraints. Thus, the project, whose initial financial resources were practically exhausted and with the outbreak of COVID 19, benefited from a repurposing of funds to reduce the impact of the pandemic in the agricultural sector and an extension of 6 months

- 174. IFAD's performance weaknesses relate mainly to: (i) the successive replacement of several Country Directors (CD) between 2013 and 2019. This high turnover of CDs during the project implementation period, about (6 CDs), did not always make it easy for the NEMA team to adapt to the monitoring and supervision style, which differs from one CD to another, and to the significant delays in obtaining IFAD's non-objection.
- 175. Overall, the quality of IFAD's supervision and support to the project is considered satisfactory.

#### F.2. Government's performance

176. The Government met all the conditions for first disbursement and provided 80% of its contribution, including paying salaries of NEMA staff. The other activities undertaken by GOTG were as follows: (i) constituted a PSU in charge of project implementation and a Project Steering Committee proactive in providing the required directions for the project implementation; (ii) organized the Annual Project Managers Forum where projects share experiences; (iii) availed the National Audit to Undertake Annual Audit of the Project; (iv) undertook constant monitoring through MOFEA Aid Coordination Directorate and the Strategy Directorate at the Office of the President; (vi) ensured through the Ministry of Finance that the Special Account was managed in compliance with IFAD's rules and regulations. The performance of the Borrower is rated satisfactory.

#### F.3. Other partners' performance (including co-financiers)

- 177. The NEMA project was also to build capacity and strengthen beneficiaries and their organizations. The capacity building initiatives were conducted through partnership with Implementing Partners (IP). Implementing partners are NGOs or government/departments/agencies with whom the PSU signed partnership agreements and their various performance is described here after:
- 178. United Purpose (UP). The partnership with United Purpose yielded several achievements for the project: (1) training and mentoring was provided to 129,500 farmers (370 garden groups each of 350 members), (2) creation of Six Marketing Federations, one in each region, with 35,217 members (33,227 women), (3) establishment of an Apex, The National Association of Vegetable Growers' Cooperative in the Gambia (NAVGC) to help advocate for the rights of the vegetable growers who are mostly women. Currently, there are 260 garden groups registered under the NAVGC, (4) training of 100 youths in management of agro-enterprises. However, only 88 youths finished and were certified, (5) establishment of 75 Seed Diversity Networks. The networks were set-up in strategic communities and includes actors along the vegetable value chain, and (6) generation of GMD22,542,309.3 (over \$400,000) in 2019 from 16 gardens.
- 179. **Department of Community Development (DCD).** The Department of Community Development conducted group management. The beneficiaries, Village Farmer Associations (VFAs), were trained in group and organizational management with a view to transforming them into viable structures that will sustain the interventions of the project. At project completion, they were able to identify core issues in participatory watershed planning and management, group dynamics; leadership, group governance (constitution and byelaws, registration, administrative procedures, conflict resolution, problem identification and analyses and resource mobilization.
- 180. **National Women Farmers Association (NaWFA).**The partnership with the National Women Farmers Association (NAWFA) was to support the project strength the capacities of beneficiaries in functional literacy. At the beginning of the project the level of illiteracy was high among women and youth beneficiaries of the project. Therefore, functional literacy was adopted as a strategy to provide adult education. Three training cycles from 2013 to 2015, 2015 to 2017, and 2017 to 2019 were conducted. A total of 790 people including 669 females and 91 males were trained during the period.
- 181. Instruction manuals on rice production, compost making, environmental sanitation, environmental protection and conservation farming in five local languages were distributed to the beneficiaries. The trainings resulted in the adoption of good and climate smart agricultural practices as well as in building human capital, in the sense that, trained facilitators and literacy participants among the beneficiaries go on and conduct step-down trainings.
- 182. **Plant Protection Services (PPS).** NEMA in partnership with the Plant Protection Services (PPS) of the DOA provided training in integrated pest management (IPM) and in Good Agricultural Practices (GAP). Fifty (50) farmer field schools (FFA) were established and the trainings benefitted 25 males and 25 females rice and vegetable farmers every year. A total of 640 farmers are active in rice and vegetable FFS sessions. The female farmers however dominate the FFS in terms of membership and participation, making up to 81% and 84% of the participants for rice and vegetable FFS, respectively. Subsequently, yields and income across the FFS increased, on average, 56% to 85.7% for onions, cabbages and tomatoes.

- 183. Horticulture Technical Services. Promotion of access to reliable and sustainable fertilizers through the establishment of compost chambers and the training of vegetable farmers was conducted by NEMA in partnership with the Horticulture Technical Service (HTS) of the Department of Agriculture (DOA) and a private enterprise called PAT-ENT. The objective was to ensure access to reliable sources of organic fertilizer that will enhance overall production and productivity, promote revenue generation and ensure the sustainability of these investments.
- 184. Each chamber had the capacity of producing 50 tons of organic fertilizer which is more than one garden's need. The excess was sold to generate revenue. At project completion, 1 000 beneficiaries were trained in compost production and management, the majority of them were women and youth.
- 185. West Africa Rural Foundation (WARF). The West Africa Rural Foundation (WARF) was another implementing partner that supported NEMA to develop knowledge products. They supported the development of eight (8) knowledge products on climate change resilience based on the experiences and innovations of the project.
- 186. **The Global Youth Innovation Forum (GYIN-Gambia).** The Global Youth Innovation Network (GYIN) with technical support of the West African Rural Foundation (WARF) was also an implementing partner of NEMA in setting up Agricultural Value Chain Interaction Platforms (AVIP). Through this partnership, at least 36 youth owned/managed enterprises (3 per platform) along the rice and horticulture value chains were established.
- 187. Grassroots Business Initiatives. Capacity building training on Business Plan development for both youth groups and individuals was conducted by NEMA in partnership with Grassroots Business Initiatives (GBI). The partnership conducted training for 25 beneficiaries which facilitated access to CISF/matching grants. The beneficiaries are now able to efficiently deal with challenges they used to face at the start of entrepreneurial activities.

## G. Assessment of sustainability

- 188. NEMA, at the beginning of project implementation in 2013 had a results matrix with a total of 12 outputs. At the closing, end of 2019, it can be said that 8 out of twelve outputs were achieved and even surpassed in many instances. The successful outputs can definitely be justified for repeat in future IFAD projects but also, they can be promoted by the government through their adoption in projects financed by the government and other donors. On the other hand, among the 4 outputs in which NEMA did not fully achieve the targets, there are activities that give the highest return to investment, i.e., they give value for money. Therefore, future investments can think of upscaling them to other communities to be identified after a mapping exercise to improve on targeting.
- 189. The evidence from NEMA is that horticulture gives a higher return per investment meaning that the vegetable gardens bring more money in the pockets of the beneficiaries. NEMA has demonstrated that the investments in total water control, security of the gardens, good soil health and zero recurrent cost by using solar to pump water can go a long way in creating wealth for the beneficiaries of the vegetable gardens who are mostly women.
- 190. The future development of agriculture in Gambia is dependent in an increasing demand for the produce. A larger market can drive production, i.e., provide suction pressure that will pull production. The bigger markets to be developed in this country can come either from industry/processors or from exports. Given the small size of the population, local consumption increase alone cannot result in the scale of production that will transform the agriculture sector but industry and exportation can do it. Therefore, in any future intervention, support to the private sector to encourage investments in the sector should be considered. The CISF/matching grants can be scaled up but after a thorough review and modification.
- 191. Maintenance needs of the infrastructures built were taken into account in the design of the project. Indeed, management and maintenance manuals should be drawn up for user associations benefiting from irrigated areas. The project developed and made available to users these manuals for the maintenance of the infrastructure built to ensure their sustainability. Provisional fees for the management and maintenance of hydraulic equipment in village vegetable gardens have been defined to support such operations.
- 192. Field visits to functioning sites show that maintenance of the infrastructure is not really effective. Indeed, the main canals, drains, concretes structures in the case of tidal irrigation schemes are very grassy or silted up. This reduces the hydraulic capacities of these channels to ensure good water service. The same is true of protective dikes and access tracks which are often submerged. Awareness should be strengthened in maintenance practices for the benefit of users in order to support the sustainability of achievements.
- 193. Given the difficulties in implementing the maintenance policy for the structures and given the level of degradation observed on the earthen channels, the damage caused by hippopotamus in all of the Tidal irrigation schemes on the canals or drains, it is recommended to propose concrete pavement of the main channels in the case of a follow-up project.

- 194. **Institutional Sustainability of Youth entrepreneurship.** There are good prospects for sustainability of the youth entrepreneuship scheme given that they were mainstreamed into the GYIN and NYC operations. However, the level of access to financing to strengthen their sustainability is weakened by the limited number of youths financed in the matching grant. Future matching grant targeting youths should focus on the upstream segments of the value chain such as processing and marketing and should be devoid of a counterpart funding to attract them and create model enterprises.
- 195. Integrated operational sustainability of the value chain actors of the grant scheme. While the 40 financed investments from the matching grants are individually operational, there is a general lack of connectedness amongst the grantees. Future grantees as a point of entry should be linked to enhance interaction amongst the value chain actors. In this regard, applicants for the matching grants must agree to sign a partnership MoU for enhancing interaction based on the type of investments being applied to ensure integration and synergies. The current loose nature of the value chain actors that received the matching grant does not guarantee partnership and sustainable value chain development
- 196. **Operational sustainability of year-round production for rice and vegetable production.** The NEMA had put in place organizational sustainability of the project structures by setting up sustainability committees to support continuous production through contract farming. This attempts to introduce contract farming provide good opportunities for women farmers to increase productivity and generate income however, arrangements to promote year-round production should be better organized. Partners particularly the producers should be well capacitated to avoid morale hazards and information asymmetries. The case of Heritage and Tropingo companies' contract farming arrangement with women gardens in Batabuto, Berefet, and Darsilameh pin points to a potential win- win situation if improved.

#### H. Lessons learned and knowledge generated

- 197. The implementation of the NEMA-Chosso has generated a series of lessons learned that could guide ongoing and future project design and implementation in The Gambia and elsewhere. The key lessons were gathered in a compendium which highlights key project achievements and illustrates how the project has contributed to improving the lives and livelihoods of rural populations across the country. From the Capital Investment Stimulation Fund/ 'Matching Grant' to investments in infrastructure development as well as capacity building and market linkages, NEMA-Chosso has worked with multiple partners and project beneficiaries to deliver key targeted project outcomes. The main lessons include:
- 198. Access to Fertilizer and Quality Seeds: (i) Collective group action by farmers in comparison to low individual purchasing and bargaining powers is an effective way of facilitating access to improved inputs for small scale-farmers; (ii) Leveraging project resources for loan guarantees as well as part-financing with a clear strategy for ownership and sustainability are key drivers of the success of this initiative; (iii) Group capacity development support is essential for effective organizational management and the ability of the POs to respond to the needs of their members and take appropriate measures to meet their contractual obligations with suppliers.
- 199. Access to Land Preparation Services: (i) Providing ploughing services at newly opened farmlands is an effective strategy to accelerate and increase production in those lands; (ii) Tractor ploughing creates employment opportunity for skilled youth and therefore contributes to curbing illegal migration among rural youth
- 200. **Capital Investment Stimulation Fund (CISF):**(i) As key target beneficiaries of the project, targeting women and youth ensures increased and active participation in the CISF scheme; (ii)Sensitizing CISF beneficiaries on the importance of savings for the purchase of spare parts and maintenance of their equipment is important for sustainability; (iii) Continuous engagement of the private sector is required to encourage ownership and sustainability
- 201. Climate Games: Climate Games are a practical and effective means of awareness creation on climate change.
- 202. Compost Chambers for Organic Fertilizer, (i) Training women on compost production increases the quality and volume of their produce which directly contributes to improved nutrition for the women, their children, their families and the overall community.
- 203. Farm-to-Market Access Roads: (i) Creating inter-village and farm to-market road linkages contributes directly to high productivity, low production costs, high competitiveness and good performance along the rice and horticulture value chains; (ii) Investing in border communities promotes trade and value chain development across national borders; (iii) The access roads have played a crucial role in increasing access to vital social facilities such as hospitals, clinics and schools
- 204. **Farmer Field Schools:** (i) Raising farmer awareness on climate change is a principal step for climate smart agriculture, prompting farmers' acceptance to participate in climate smart agriculture interventions. What next? (ii)

Mainstreaming Farmer Field Schools as an Extension Strategy Strengthening the capacity of Plant Protection Services of the Ministry of Agriculture to ensure adoption of Good Agricultural Practices: (iii) Adoption of appropriate technologies and improved and certified seed.

- 205. **Functional Literacy:** (i) Focusing on what adult learners want to know and have interest in gives better results because such issues are the most relevant to the learners: (ii) Mentoring and following-up with participants are essential to helping them understand how to apply what they have learned.
- 206. **Functional Village Farmer Associations:** (i) Management of VFAs at community level is essential for progression; (ii) Transforming VFAs into Producer Organizations is critical for the sustainability of their functionality.
- 207. Integrated Land Management to Address Land Degradation: (i) Management of land degradation should be done within the framework of wetlands Identify, demarcate and chart wetlands approach.
- 208. Land and Infrastructure Investments: (i) Providing women access to more arable lands for increased yields will translate into increased food and nutrition security for rural households as well as increased revenues for rural women farmers across the country. (ii) Beneficiary ownership and maintenance of project facilities and infrastructure<sup>[1]</sup>The general framework of handing over of project facilities to beneficiaries and linking them to the Directorate of Agriculture is indeed an effective mechanism for ensuring ownership, effective management and maintenance of the project facilities. This is a fundamental pillar for ensuring the sustainability of the NEMA Chosso investment in infrastructure and facilities across the country.
- 209. **Mangrove Restoration and Establishment of Woodlots:** (i) Ownership and sustainability of the initiative are essential for meaningful climate change adaptation and resilience and long-term food security and livelihood.
- 210. **Producer Organizations**: (i) Increased access to crucial production inputs by PO members translates directly into yield and productivity gains; (ii) Supporting the establishment of viable POs is essential for value chain actors to participate profitably along key agricultural value chains in The Gambia
- 211. A number of lessons learnt have been identified during the design of the Chosso from projects dealing with climate change in the country (UNDP, UNEP, NEA, MoECCNAR) and the Region (GEF-, LDCF-, SCCF- and AF-funded projects) some of them are still relevant today and are presented in Annexes 1 and 3 of this report.
- 212. The completion of the earthworks is subject to climatic constraints which result in the delay in the delivery of the facilities. In subsequent projects, it is essential to plan achievements only in the dry season and to take advantage of the rainy season to carry out all the design project studies.
- 213. In addition, the project could have benefited from a partnership with the National Roads Authority (NRA) which has all the expertise as well as the equipment (quality control laboratory for earthworks) necessary for the proper execution of such projects. works. As such, it makes more sense to separate concrete-type work and ad hoc structures from construction work using earth, laterite or gravel materials as part of an allotment of contracts.
- 214. In the implementation of vegetable gardens, planning should prioritize the realization of the borehole first, then the reservoirs and their supply line and finish with the building and the fence.

#### 215. Table 2: List of challenges for KM & Communication during NEMA implementation

No	KM Challenge	Recommendation
1	Knowledge management system (KMS) needs usage of Information and Communication Technology (ICT) for the purpose of managing knowledge, by providing the right knowledge to the right workers at the right time.	In the ROOTs project, there should be short training on ICT technology and information to enable KM Officers to manage knowledge to be able to communicate knowledge to right people at the right time.
2	Lack of documentation center for KM products, documents, and documentaries	A documentation center should be provided in the ROOTs project or even beyond to safeguard the documents for future use.
3	Lack of a KM Assistant was a big Challenge	The Officer should have a KM & Communication Assistant

4	The budget for KM activities was inadequate especially when it comes to Farmer to Farmer Visit abroad	Enough budget should be allocated for effective experience sharing to take place in country or sub-region
Comm	unication Challenges and Recommendations	
1	Lack of Communication equipment e.g. State of the earth Cameras	ROOTs should provide a very good camera and Video Camera
2	Limited Video and Photography skills	Short training on Video and Photography skills needed.

216. [1] Extracted from the NEMA Chosso achievement study

#### I. Conclusions and recommendations

- 217. On the basis of the analysis made by the present PCR mission, the overall NEMA-Chosso performance is rated as satisfactory. This rating takes into consideration several performance criteria (see appendix 3), the local context, and the solutions selected and implemented in front of the challenges that faced the implementation partners and the beneficiaries.
- 218. The project was successfully implemented both on qualitative and quantitative terms and it succeeded in helping the women and the youth better organize themselves all along the value chains, improve their working conditions and increase their revenues. The project has formed key beneficiaries into groups and this has effectively facilitated project implementation, beneficiary participation and ultimately, ownership of the outcomes as well as ensuring sustainability.
- 219. Most project activities were implemented within schedule, and certain ahead of time and within budget. A reestimated EIRR at 19% is slightly lower than the EIRR of 21.8% realized at appraisal which can be attributed to the delayed completion of infrastructure for both tidal and vegetable schemes inhibiting their optimal operationalization.
- 220. Project investments represented good value for money and the project has thus remained an attractive investment financially and economically viable, and the EIRR stabilized above the 10% discount rate (the opportunity cost of capital). Project implementation arrangements and procedures were efficient and output delivery was non-problematic with good achievements as indicated in the effectiveness section.
- 221. The continuation of several project benefits is most likely ensured beyond project completion, with the full beneficiaries' ownership of project interventions and full government support and commitment as well as the realistic post-project sustainability strategy (exit strategy validated by key stakeholders including beneficiaries, government and the private sector) defined during project implementation.
- 222. The evidence from NEMA is that horticulture gives a higher return per investment meaning that the vegetable gardens bring more money in the pockets of the beneficiaries. NEMA has demonstrated that the investments in total water control, security of the gardens, good soil health and minimal recurrent cost by using solar energy to pump water can go a long way in creating wealth for the beneficiaries of the vegetable gardens who are mostly women.
- 223. Key drivers of success. The NEMA-Chosso successes on several counts can be attributed to key factors such as: (i) dedication of project staff, (ii) excellent working relationship between the PSU, the various services of the Ministry of Agriculture, including the CPCU, (iii) good implementation of recommendations made during the MTR and subsequent supervision and implementation support missions; (iv) increased interest of project beneficiaries; and (v) regular and efficient implementation support and intensive supervision by the IFAD office supported by a team of local and international consultants.
- 224. The scope of projects under the NEMA PSU are quite comprehensive which caters for the resilience aspects for the majority of smallholders in the project target area. The components financed by IsDB and AfDB complemented the IFAD-funded NEMA Chosso components by providing for livestock development which is absent in NEMA Chosso. This provides for increased diversification in the face of resilience and adaptation to climate shocks.

- 225. Innovation, replication and scaling-up. The NEMA PCR mission identified several good practices considered as innovative actions in terms of implementation approaches, new technologies or organizational, institutional or financial innovations, offering significant potential for scaling up. Five replicable innovation have been identified in the annex (2) Innovation Tables and many institutions (FAO, Ecowas, World Bank, and Roots project are keen to replicate the innovations and successes of the NEMA-Chosso project. One of them is the Agriculture Value Chain Interaction Platform established in 2017. With major achievements in the delivery of key outputs of NEMA, attention increasingly turned to the outcomes of the investments and their effects on the lives and livelihoods of the beneficiaries.
- 226. Challenges. NEMA failed to reach the set targets for the following outcomes:
  - The revised target area at MTR for tidal irrigation scheme was 810 ha but the actual area developed is 447,5 ha which is just 55% achievement;
  - The revised target at MTR for vegetable garden schemes was 300 ha but at project completion just 165 ha was achieved. The project achieved 55% of the target;
  - 7 gardens have not been fully completed since the project has not launched the procurement relating to the drilling, elevated reservoir and the network of pipes to supply the ground tanks. For these gardens only the building and the toilets, the fence and the ground tanks were completed.
- 227. On the AVIP platforms, farmgate prices charged by producers were considered too high thus rendering the contractual agreements unsustainable. This challenge was expressed by ChickFarm and Heritage experiences.
- 228. The NEMA-Chosso Project has been implemented with financial support from IFA, GoTG, the IsDB and the beneficiaries' contribution. The project would have achieved much better results if it had not faced several challenges, such as:
  - The non-alignment of implementation schedules among these projects presented challenges in terms of the lost opportunities for synergy and efficiency in implementation of project activities. This also had effects on the procurement challenges, as bulking of land development works could have attracted more competitive contractors (increased competence and capacity) to bid for the civil works.
  - Implementation support through joint missions by the three partners could have been strengthened and some of the implementation challenges encountered could have been better resolved. Donor perspectives on synergies between the project could enhance the quality of the project development objective and overall impact of the investments.
- 229. Lessons learned and knowledge generated. The implementation of the NEMA-Chosso has generated a series of lessons learned that could guide ongoing and future project design and implementation in The Gambia and elsewhere (these are detailed in the attached annexes)

#### **Summary of Recommendations**

- 230. **Implementation modalities**: For any new follow-up project, a very explicit organigram should be defined which will include all the structures and functions necessary to implement the project. All the skills needed should be identified, and the job descriptions be clearly articulated. The recruitment of the personnel shall be done with the support of external and independent professionals to avoid the inadequacies faced by NEMA.
- 231. Relevance with respect to felt needs: A socio-economic unit could be set-up in the PSU of the follow-up project, alongside the M&E, to measure relevance and outcomes (transformational change) leading to impact of the project on the lives of the beneficiaries.
- 232. Internal logic: The follow-up project should conduct a proper theory of change exercise and all partners even before engagement should understand it.
- 233. Adequacy of design changes: in any follow-up project, all PSU and partners must understand the log frame and its results. The targets must be scrutinized as to reason and achievability, all the indicators must be SMART, all the assumptions must be realistic and a risk management/mitigation plan must be drawn before the project commencement.
- 234. Watershed development: IFAD and the PSU must be more vigilant and rigorous with regard to procurement activities, particularly the recruitment of companies in charge of developing the tidal rice perimeters. The capacities of these companies in both expertise and equipment must be seriously ascertained and if need be joint ventures with companies from neighbouring countries should be encouraged.
- 235. The PCR mission strongly recommends that the recently approved ROOTS Project helps to complete the last batch of 17 gardens which are already provided with chain-link fence, toilets, reservoirs and farmhouse each but which are still requiring water supply and distribution systems installation. These gardens constitute a big concern because it is only when the water supply is provided that the investments could be justified.

- 236. The completion of the earthworks is subject to climatic constraints which result in the delay in the delivery of the facilities. In subsequent projects, it is essential to plan achievements only in the dry season and to take advantage of the rainy season to carry out all the design project studies.
- 237. In addition, the project could have benefited from a partnership with the National Roads Authority (NRA) which has all the expertise as well as the equipment (quality control laboratory for earthworks) necessary for the proper execution of such projects works. As such, it makes more sense to separate concrete-type work and ad hoc structures from construction work using earth, laterite or gravel materials as part of an allotment of contracts.
- 238. In the implementation of vegetable gardens, planning should prioritize the realization of the borehole first, then the reservoirs and their supply line and finish with the building and the fences.
- 239. Agricultural Commercialization: (1) a future follow-up project should not be involved in construction of markets because NEMA succeeded only in constructing 2 out of 10 markets, and (2) the matching grants should be better organized as follows: a) the ratio of participation can be reviewed to increase project matching grant participation, and b) the funding can be better targeted and strategically organized, e.g., within a value chain, funding support is accorded to all the actors such as: the input dealers, the producers, the marketers, the processors and the exporters.
- 240. **Innovation and scaling-up**: Some of the key lessons learned that would be useful to consider during the next project include:
- 241.- Criteria to access the Matching Grant directly affects the emergence of youth-led/managed enterprises. The revision of the Matching Grant from 45%:10%:45% at project design to
- 242.- 60%:40% post MTR, in addition to capacity building, coaching and mentoring services are critical for increased access to and sustainability of agribusinesses.
- 243. Having in place a governance mechanism including an arbiter or price control and management of contracts is critical to sustainable partnerships between producers and buyers.
- 244. **Financial aspects:** These are the lessons learned from NEMA-Chosso project which will be useful for the successful implementation of Roots:
  - Reduce the contracts committee members to include members with a relevant type of skills, knowledge and experience relevant to the procurement requirement as far as possible, which may include: technical skills; enduser representatives; procurement and contracting skills; financial management or analysis skills as specified in the IFAD Procurement Handbook.
  - The mission highlighted that delays in contract implementation is usually caused by flood in the lowlands and recommends that all low land contracts should be given priority in the future. This may include conducting all low land and tidal irrigation works in the first year of the project and excluding the wet season from the contract period.
  - The PCR mission advises that PSU should ensure that the procurement files for all procurement are appropriately organized, coherently filed and securely stored for future procurement review and audit. The project is also advised to build an electronic backup file for each procurement activity.
- 245. **Quality of supervision:** In a follow-up project, all the implementing partners must be evaluated formally at MTR and PCR to ascertain their effectiveness.

### 246. Sustainability:

- In any future intervention, support to the private sector to encourage investments in the sector should be considered. The CISF/matching grants can be scaled-up, but after a thorough review and
- Given the difficulties in implementing the maintenance policy for the structures and given the level of degradation observed on the earthen channels, the damage caused by hippopotamus in all of the Tidal irrigation schemes on the canals or drains, it is recommended to propose concrete pavement of the main channels in the case of a follow-up project.
- Future matching grant targeting youth should focus on the upstream segments of the value chain such as processing and marketing and should be devoid of a counterpart funding to attract them and create model enterprises.





# National Agricultural Land and Water Management Development Project

**Project Completion Report** 

**Appendix 1: Project logical framework** 

 Mission Dates:
 19/10/2020 5/11/2020

 Document Date:
 15/05/2021

 Project No.
 1100001643

 Report No.
 5635-GM

 DSF Grant ID
 2000001124

West and Central Africa Division Programme Management Department

# National Agricultural Land and Water Management Development Project

# Logical Framework

Results			Indie	cators				Means o	f Verification		Assumptions
Hierarchy	Name	Baseline	Mid- Term	End Target	Annual Result (2020)	Cumulative Result (2020)	Cumulative Result % (2020)	Source	Frequency	Responsibility	
Outreach NEMA	1.b Estimated correspond	ling total nui	mber of h	ouseholds	members	;					Average size of HH: 9 pers./HH N.B. the
INEINIA	Household members		91 575	264 861	0	413 712	156.2				number of
	1.a Corresponding number	er of househ	olds read	hed				RIMS	annual	PMU	households will need to be
	Women-headed households					0					reassessed by the project
	Non-women-headed households					0					
	Households		10 175	29 429	0	45 968	156.2				
	1 Persons receiving servi	ces promote	ed or sup	ported by t	he project			RIMS	annual	PMU	
	Females		5 088	14 714	0	23 444	159.3				
	Males		5 088	14 715	0	22 524	153.1				
	Young			4 415	0	15 399	348.8				
	Not Young					0					
	Indigenous people					0					
	Non-Indigenous people					0					
	Total number of persons receiving services		10 175	29 429	0	91 936	312.4				
	Poor smallholder househo	old member	s support	ed in copii	ng with the	effects of clin	ate change	ASAP- Chosso baseline,	annual	PMU	
	Females			26 939		38 597	143.3	impact surveys			
	Males			25 882		37 084	143.3				
		1	1		1	1					

Results	Name		Indio	ators				Means of	Verification		Assumptions		
Hierarchy	Name	Baseline	Mid- Term	End Target	Annual Result (2020)	Cumulative Result (2020)	Cumulative Result % (2020)	Source	Frequency	Responsibility			
	Total household members			52 821	0	75 681	143.3						
	SH HH supported in copi	ng with the e	effects of	climate ch	ange	-		ASAP	annual	PMU			
	Households												
	Households			5 869	0	8 409	143.3						
Gru Gru Project Goal Nu	Communities receiving pr	roject service	es					RIMS	annual	PMU			
	communities			150	0	284	189.3						
	Groups receiving project	services						RIMS	PMU				
	Groups			150	0	284	189.3						
	Number of rural people e income, consumption, we					(10% or more)	including	Impact Survey	End line	M&E officer, PD National Statistics	Continued political stability, commitment to		
and youth	Rural People			57 240	0	37 234	65.049			Statistics	poverty reduction		
Development Objective	Beneficiary households a production	achieving an	increase	in income	of at least	t 15% from upla	and crop	RIMS Baseline Impact Surveys, National	2 per project life	PMU	Policies favouring SH market-oriented		
Objective pro	нн			4 000	0	4 630	115.75	Divisional Surveys, GNAIP reports, National Agricultural Database, Project Completion Report			agriculture; sustained emphasis on income- generating		
sustainable land	Women recording an ann	nual income o	of at leas	t USD 163	from rain	fed, lowland ric	e production	RIMS Baseline Impact	2 per	PMU	opportunities for youth		
and water	Income increase			12 400	0	25 466	205.4	Surveys, National Divisional Surveys, GNAIP reports, National Agricultural Database, Project Completion Report	project life				

Results			Indic	ators				Means of	Verification		Assumptions
erarchy	Name	Baseline	Mid- Term	End Target	Annual Result (2020)	Cumulative Result (2020)	Cumulative Result % (2020)	Source	Frequency	Responsibility	
	Women recording an ann	ual income o	of at least	t USD 826	from irriga	ated tidal rice p	production	RIMS Baseline Impact	2 per	PMU	
	women (rice production)			2 000	0	751	37.6	Surveys, National Divisional Surveys, GNAIP reports, National Agricultural Database, Project Completion Report	project life		
	Women recording an ann	ual income o	of at least	t USD 826	from vege	etable producti	on	RIMS Baseline Impact Surveys, National	2 per	PMU	
	women (vegetable production) Beneficiaries with change in l			4 800	0	5 742	119.6	Divisional Surveys, GNAIP reports, National Agricultural Database, Project Completion Report	project life		
		nge in HH income due to agricultural activi			al activitie	s disaggregate	ed	RIMS Baseline Impact Surveys, National	2 per project life	PMU	
	beneficiaries			81	0	81	100	Divisional Surveys, GNAIP reports, National Agricultural Database, Project Completion Report	project me		
	Youth employed in full tim gender)	ne jobs creat	ed in agr	icultural se	ervice busi	inesses (disag	regated by	RIMS Baseline Impact Surveys, National	2 per project life	PMU	
	Males				0	224		Divisional Surveys, GNAIP reports, National			
	Females				0	120		Agricultural Database, Project Completion Report			
	Male/female			300	0	344	114.7				
	Male/female CHOSSO: SH households ASAP	s whose clin	nate resli	ence has b	been incre	ased by at 159	% due to	Chosso baseline & impact surveys	2 per project life	PMU	
	Households			100		143	143				

Results			Indic	ators				Means of	Verification		Assumptions
Hierarchy	Name	Baseline	Mid- Term	End Target	Annual Result (2020)	Cumulative Result (2020)	Cumulative Result % (2020)	Source	Frequency	Responsibility	
Outcome	1.2.4 Households reportir	ng an increas	se in proc	luction						PMU	Government
1. Improved productivity of	Households	0	3	70	0	81	115.714				committed to lowland rice
scarse agricultural lands and enhanced climate resilience of targeted beneficiaries	Households										development based on validation and implementation of the Gambia National Rice Strategy; Robust arrangements made for regular maintenance of infrastructure; Positive supply side response to improved potential profitability of crops; Appropriate rice and vegetable import tariff regimens to incentivise local producers
Output 1.1. Effective	Number of plan implemer approach	nted accordi	ng to a co	omprehens	ive waters	shed developm	nent	RIMS	annual	PMU	
management of watershed infrastructure in place	Number					0					
Output 1.2 Rice irrigated	land under tidal irrigation water control drainage)	(old and nev	w), of whi	ch (see ind	dicator for	tidal areas dev	veloped with	RIMS from Monthly reports from service	annual	PMU	
schemes developed	Land tidal irrigation							providers, quarterly reports, M&E reports			
	1.1.2 Farmland under wa	ter-related ir	frastruct	ure constru	ucted/reha	bilitated	-				
	Hectares of land		9 570	18 400	0	17 794.5	96.7				

Results			India	cators				Means of	Verification		Assumptions
Hierarchy	Name	Baseline	Mid- Term	End Target	Annual Result (2020)	Cumulative Result (2020)	Cumulative Result % (2020)	Source	Frequency	Responsibility	
	(Disaggregated) Farmlan which:	d under wate	er-related	l infrastruc	ture const	ructed/rehabili	tated of				
	Ha of upland cropping area under control		3 000	4 000		4 630	115.8				
Ha         sct         (in,         coi         Ha         un         Output         Lai         1.3 Vegetable	Ha of tidal irrigation scheme developed (including 232 ha of conversion)		810	2 000		431.5	21.6				
	Ha of lowland undercontrol		5 760	12 400		12 733	102.7				
Output	Land under improved ma	ractices					Monthly reports from	annual	PMU		
Dutput Lan .3 Vegetable ardens Heo nfrastructure onstructed	Hectares of land			240	0	165	68.75	service providers, quarterly reports, M&E reports			
Output	1.1.4 Persons trained in p	production pr	actices a	ind/or tech	nologies			RIMS-People trained in	annual	PMU	
1.4 Stregthened producer	Men trained in crop			1 500	0	3 210	214	crop production/technologies1			
capacity	Women trained in crop			6 000	0	12 790	213.167				
	Young people trained in crop				0	2 308					
	Men trained in livestock					0					
	Women trained in livestock					0					
	Young people trained in livestock					0					
	Men trained in forestry					0					
	Women trained in forestry					0					

Results			Indie	cators				Means of	Verification		Assumptions
Hierarchy	Name	Baseline	Mid- Term	End Target	Annual Result (2020)	Cumulative Result (2020)	Cumulative Result % (2020)	Source	Frequency	Responsibility	
	Young people trained in forestry					0					
	Men trained in fishery					0					
	Women trained in fishery					0					
	Young people trained in fishery					0					
	Total persons trained in crop				0	32 000					
	Total persons trained in livestock					0					
	Total persons trained in forestry					0					
	Total persons trained in fishery					0					
	2.1.2 Persons trained in it	ncome-gene	erating ac	tivities or b	usiness n	nanagement		RIMS-people trained in	annual	PMU	
	Females			400	0	129	32.3	business/entrepreneurship			
	Males			100	0	175	175				
	Young				0	4					
F	Persons trained in IGAs or BM (total)			500	0	608	121.6				
<b>Dutput</b> I.5 Climate	Land under climate-resilie	ent practices									
resilient practices promoted	Land area			1 530	0	1 954.75	127.761				

Results			Indi	cators				Means of	Verification		Assumptions
Hierarchy	Name	Baseline	Mid- Term	End Target	Annual Result (2020)	Cumulative Result (2020)	Cumulative Result % (2020)	Source	Frequency	Responsibility	
Outcome	2.2.5 Rural producers' org	ganizations	reporting	an increas	se in sales	i					Robust
2 Increase the profitable trade	Percentage of rural POs	0	0	25		100	400				arrangements mad for regular
in rice and vegetables	Number of Rural POs				0	24				maintenance of infrastructure	
produced by small-scale farmers	Rural POs wtih women in leadership position				0	144					
	Rural POs - crop				0	24					
	Rural POs - fisheries										
	Rural POs - forestry				0	68					
	Rural POs - livestock										
	Rural POs - livestock 2.2.3 Rural producers' org with public or private entit		engaged	in formal p	partnership	os/agreements	or contracts				
	2.2.3 Rural producers' org		engaged	in formal p 30	-	-	or contracts				
	2.2.3 Rural producers' org with public or private entit		engaged	-	-	-					
	2.2.3 Rural producers' org with public or private entit Number of POs		engaged	-	-	24					
	2.2.3 Rural producers' org with public or private entit Number of POs Percentage of POs Percentage of		engaged	-	-	24					
	2.2.3 Rural producers' org with public or private entit Number of POs Percentage of POs Percentage of indigenous POs Women in leadership		engaged	-	0	24					
	2.2.3 Rural producers' org with public or private entit Number of POs Percentage of POs Percentage of indigenous POs Women in leadership position		engaged	-	0	24 100 144					
	2.2.3 Rural producers' org with public or private entit Number of POs Percentage of POs Percentage of indigenous POs Women in leadership position Number of POs - crop Number of POs -		engaged	-	0	24 100 144					

Results			Indic	ators				Means of	Verification		Assumptions
Hierarchy	Name	Baseline	Mid- Term	End Target	Annual Result (2020)	Cumulative Result (2020)	Cumulative Result % (2020)	Source	Frequency	Responsibility	
Output	2.1.5 Roads constructed,	rehabilitateo	d or upgra	aded				RIMS	annual	PMU	
2.1 Rice and vegetable	Length of roads			50	0	75.28	150.56				
marketing improvement	2.1.6 Market, processing	or storage fa	acilities co	onstructed	or rehabil	itated		RIMS	annual	PMU	
	Total number of facilities			10	0	114	1 140				
	Market facilities constructed/rehabilitated			10	0	2	20				
	Processing facilities constructed/rehabilitated				0	19					
	Storage facilities constructed/rehabilitated				0	36					
	2.1.3 Rural producers' org	anizations s	supported	1							
	Rural POs supported			24	0	24	100				
	Males				0	216					
	Females				0	216					
	Young				0	48					
	Indigenous people					0					
	Non-Indigenous people					0					
	Women in leadership position					0					
Output	2.1.1 Rural enterprises ac	cessing bus	siness de	velopment	services						
2.2 Youth inclusion	Rural enterprises	0	27	250	0	172	68.8				
	Males				0	78					
	Females				0	94					
	Young				0	100					

Results			Indie	cators				Means of	Verification		Assumptions
Hierarchy	Name	Baseline	Mid- Term	End Target	Annual Result (2020)	Cumulative Result (2020)	Cumulative Result % (2020)	Source	Frequency	Responsibility	
	Women in leadership position				0	94					
Output	Number of Enterprises/F0	Os supporte	d for busi	ness deve	lopment					PMU	
2.3 Agricultural Enterprises Promotion	Number of Enterprises/FOs	0	24	55	0	172	312.727				
Outcome 3 Effective	Policy 3 Existing/new law approval, ratification or ar		is, policie	s or strate	gies propo	osed to policy r	makers for				Financial Institution willing to participate
project facilitation	Number	0	2	3	0	3	100				in the CISF
Output	Policy 1 Policy-relevant k	nowledge pr	oducts c	ompleted							
3.1 The project knowledge	Number	0	4	10	0	9	90				
management inform sectoral	Policy 2 Functioning mult	i-stakeholde	r platforn	ns support	ed						
policy and planning	Number				0	12					
	International and country	dialogues o	n climate	supported							
	Dialogues			6	0	6	100				
Output	M&E system set-up and o	operational									
3.2 Operational Monitoring and	M&E system				0	1					
Evaluation	Survey carried-out										
	Survey				0	5					
Output	Running cost of the proje	14%			•						
3.3 Project managed efficiently and effectively	Running cost			14							





National Agricultural Land and Water Management Development Project

**Project Completion Report** 

Appendix 2: Summary of amendments to the financing agreement

 Mission Dates:
 19/10/2020 5/11/2020

 Document Date:
 15/05/2021

 Project No.
 1100001643

 Report No.
 5635-GM

 DSF Grant ID
 2000001124

West and Central Africa Division Programme Management Department

# Appendix: Summary of amendments to the financing agreement

- Amended and restated on 1 March 2016 providing additional Funds to the project of USD 14 Million for NEMA (Grant/Loan) and 5 Million for Chooso (ASAP/Grant). Financing Agreement Grant No. I-DSF-8108-GM/Loan No. 2000001123/Additional DSF Grant No. 2000001124/ASAP Grant No. 2000001395 National Agricultural Land and Water Management Development Project (NEMA) Amendment to the Financing Agreement (Restated as 1 March 2016).
- 2. NEMA- Increase of the initial deposit (Advance) for the Designated Account from USD 1,300,000 to USD 3,173,5331.
- 3. CHOOSO- Increase of the initial deposit (Advance) from the Designated Account from USD 800,000 to USA USD1,274,400.
- 4. NEMA-Funds Reallocation in February 2019: The Government of Gambia and the NEMA PSU requested a reallocation of unallocated funds by category of Grant No. I-DSF-8108-GM/Loan No. 2000001123/Additional DSF Grant No.2000001124/ASAP Grant No. 2000001395 from IFAD on December 10, 2018, a request that was approved on February 21, 2019. The proposed reallocation under IFAD Grants and Loan would provide the programme with the required resources to successfully complete planned investment.





# National Agricultural Land and Water Management Development Project

**Project Completion Report** 

**Appendix 3: Actual project costs** 

 Mission Dates:
 19/10/2020 5/11/2020

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West and Central Africa Division Programme Management Department

# Appendix 7: Actual project costs

Fina	ancial Performance By Financiers As	s At 31/10/2020 - [USD]	
Source of Funding	Approved Allocation USD	Disbursement to Project USD	Disbursement rate %
IFAD Grant-Original	20,279,999.00	18,661,559.08	92.02
IFAD Grant-Additional	7,065,766.00	6,993,693.28	98.98
IFAD Loan -New	7,065,766.00	6,992,928.82	98.97
IFAD ASAP-Grant	5,000,000.00	4,961,892.49	99.24
Total IFAD	39,411,531.00	37,610,073.67	95.43
GoTG	2,837,249	2,201,473	77.59
Beneficiaries	684,065.00	164,862.22	24.1
Lenders	954,292.67	703,177.47	73.69
TOTAL	43,887,137.67	40,679,586.27	92.69

Table 5 ANational Agricultural Land and Water Management Development Project (NEMA)Financial Performance By Financiers As At 31/10/2020 - [USD]

Table 5B

National Agricultural Land and Water Management Development Project (NEMA)

Financial Performance by Financiers and Component as at 31/10/2020 - [USD]

	G	OTG			IFAD			IFADB		I	FADLN		СНО	SSO / ASAP		L	ENDR		
Name	Appraisal	Actual	%	Appraisal	Actual	%	Appraisal	Actual	%	Appraisal	Actual	%	Appraisal	Actual	%	Appraisal	Actual	%	Арр
Agricultural Commercialisation	1,607,250	1,186,355	74	4,823,445	2,839,629	59	823,402	1,863,642	226	823,402	1,863,642	226	367,763	310,104	84	954,293	703,177	73	68
Project Facilitation	30,000	25,624	85	3,010,354	3,990,126	133	729,064	983,492	135	729,064	978,406	134	1,367,833	881,986	64	0	0	0	
Watershed development	1,200,000	989,494	82	12,446,218	10,519,298	85	5,513,301	4,781,761	87	5,513,301	4,747,911	86	3,264,403	3,644,246	112	0	0	0	
Total	2,837,250.00	2,201,473	78	20,280,018	17,349,053	86	7,065,767	7,628,894	108	7,065,767	7,589,958	107	4,999,999	4,834,596	97	954,293	703,177	73	68

# Table 5C:National Agricultural Land and Water Management Development Project (NEMA)Financial Performance by Category as at 31/10/2020 - [USD]

I mancial I er	ioi manee sj	cutegory us	<b>ut t</b> 1/10		1							
		ASAP			IFAD			IFADB			IFADLN	
Name	Appraisal	Actual	%	Initial Allocation	Actual	%	Appraisal	Actual	%	Appraisal	Actual	%
Civil Works,Vehicles,Goods,												
and Equipment	2,621,000.00	2,683,793.20	102.40	9,263,806.01	9,450,771.69	102.02	4,033,632.61	3,932,396.82	97.49	4,042,076.15	3,932,630.36	97.29
Technical Assistance	215,000.00	44,684.84	20.78	840,000.00	615,748.08	73.30	110,610.58	110,610.58	100.00	110,605.37	110,605.37	100.00
Training,Monitoring, and Evaluation	642,000.00	639,689.22	99.64	1,612,647.69	1,612,647.69	100.00	399,620.35	449,074.48	112.38	410,781.92	460,236.05	112.04
Fund	-	-		412,104.07	412,104.07	100.00	72,500.00	72,623.69	100.17	72,500.00	72,623.69	100.17
Staff Salaries(Allowance)	80,000.00	81,674.49	102.09	785,752.06	803,890.07	102.31	320,487.41	329,367.90	102.77	302,501.23	311,387.27	102.94
Operating Cost	12,000.00	11,069.02	92.24	235,690.17	244,938.69	103.92	88,149.05	75,552.46	85.71	86,535.33	73,938.74	85.44
UN ALLOCATED		108,639.62			9,492.75			55,064.56			63,258.21	
Total	3,570,000.00	3,569,550.39	99.99	13,150,000.00	13,149,593.04	100.00	5,025,000.00	5,024,690.49	99.99	5,025,000.00	5,024,679.69	99.99







National Agricultural Land and Water Management Development Project

**Project Completion Report** 

Appendix 4: Project internal rate of return (detailed analysis)

 Mission Dates:
 19/10/2020 5/11/2020

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 Project No.
 1100001643

 Report No.
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West and Central Africa Division Programme Management Department

# Appendix 4: internal rate of return (detailed analysis)

At project completion, the *NEMA-Chosso* has invested all of its total funds of USD 39.4 million into the three components: Watershed Development; Agricultural Commercialization; and, Project Facilitation. A Financial and economic analysis has been carried out as part of the PCR process to determine whether the project is financially and economically viable and sustainable to the beneficiaries.

The Analysis was based on seven core enterprises<sup>11</sup> for which farm budgets were developed covering the cost and revenue per hectare. The Return to labour computations based on the yields achieved within the NEMA project intervention areas and the ongoing market price of commodities, indicate that the return to labour is favourable to the producers. Accordingly, within the lowlands, NEMA registered a significant increase in yield compared to the projected PDR values. Developed lowland swamps registered average yields of 2.5mt/ha compared to the projected 1.8mt/ha of the PDR; return to labour of US\$9.12 (well above the US\$3/day prevailing wage rate) was achieved compared to the projected PDR value of US\$2.8. Similarly, the dry and wet season tidal irrigation schemes achieved US\$7.40 and US\$9.95 respectively, well above the PDR projected return to labour of US\$4.91 and US\$4.44.

The return to labour for the vegetable schemes as indicated in the PDR are much higher compared to the rice production schemes. It is noted at completion that the return for labour for tomato is much higher than onions – youth gardens registered US\$42.36 for onions and US\$124.20 for tomatoes and women's gardens achieved US\$59.87 for onions and US\$124.33 for tomatoes. These achievements surpassed the projected PDR average value of US\$57 for the youth gardens.

Table 1 presents data on yield comparison of *NEMA-Chosso* without the project and achievement at PCR. It shows significant yield increases for all the seven core enterprises of *NEMA-Chosso*.

Yield Levels	Without Project (Mt/ha)	With Project (Mt/ha)
Lowland (rainfed)Rice	0.7	2.5
Tidal rice- wet season	1.5	3.0
Tidal rice-dry season	1.5	3.5
Onion youth	-	14
Onion Women	0.7	14
Tomato Youth	-	30
Tomato Women	0.8	30

Table 1: Yield Comparisons of NEMA Chosso With and without project at PCR

Source: NEMA PDR and Progress Reports

Further analysis in line with the Project Design Report (PDR), were conducted using the seven core enterprises. Data from the crop budgets (benefit and cost streams) together with the areas developed and the investments incurred for NEMA and Chosso (life of the project) were computed and analysed for a 20-year period to determine the NPV, FIRR and EIRR of the project. Key assumptions employed in the analysis include: Revenue (benefit) stream and costs accrued were valued at prevailing price levels in 2020; Duty waivers and taxes were exempted from the computations; and, an open economy with price and exchange rate stability.

The results of the analysis at PCR, show a re-estimated EIRR at 19% with an NPV of 152, 338,686.80. This figure is slightly lower than the EIRR of 21.8% with an NPV of 54,192,090 realized at appraisal. The project has thus remained a financially and economically viable and attractive investment. The slight decline can be attributed to the delayed completion of infrastructure for both tidal and vegetable schemes inhibiting their optimal operationalization. More importantly, the EIRR also stabilized above the 10 % discount rate (the opportunity cost of capital). Furthermore, only the core enterprises were

<sup>&</sup>lt;sup>11</sup> Lowland (rainfed rice), Tidal rice-wet season, tidal rice-dry season, onion youth, onion women, tomato youth and tomato women

used, thus a number of enterprises including Upland crops, NRM interventions to mitigate the adverse impacts of climate change were not quantified.

Key risks to maintaining the benefit stream of NEMA-Chosso relate to: quality of the infrastructure (tidal, upland and vegetable schemes) at completion, particularly that it is robust and climate proof for sustained production; optimal Operation and maintenance (O&M) of the infrastructure by the beneficiaries after project completion; and, adoption of improved production practices (Good Agricultural Practices) by beneficiaries to maintain the yields and income streams.

## Sensitivity Analysis

Based on the computed EIRR of 19 % derived from the available project database and reviewed literature, a sensitivity analysis (Table 2) was carried out with the purpose of assessing the impact of Changes in cost and revenue streams on EIRR base case scenario. The analysis showed five main scenarios: A base case scenario; Scenario 2: a 10% increase in revenue increases the EIRR to 22%, Scenario 3: a 10% decrease in revenue decreases EIRR to 20%, Scenario 4: a 20% increase in revenue increases EIRR to 33% and Scenario 5: a 20% decrease in costs increases EIRR to 27%. These analyses show that the project is quite resilient and can uphold against any myriad of constraints as long as the EIRR is kept above the 10% opportunity cost of capital elsewhere.

## **Table 2: Sensitivity Analysis**

Sensitivity Analysis	Base Case	10% Increase in Revenue	10% Decrease in Total Cost	20% Increase in Revenue	20% Decrease in Total Cost
FIRR	28%	34%	32%	40%	36%
EIRR	19%	22%	20%	33%	27%

#### The Gambia National Agricultural Land and Water Management Development Project (NEMA Chosso) Project completion report Appendix 4 :Project internal rate of return (detailed analysis)

# Table 3: ECONOMIC AND FINANCIAL ANALYSIS

		-		-																	
REVENUE	Without Project Situation										With F	Project									
	0	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Tidal Wet	0	2010	2014	1400	2800	4200	12600	17826	17826	18806	18806	18806	18806	18806	18806	18806	18806	18806	18806	18806	18806
Season	4520520	0	0	000	2800	4200	000	060	060	060	060	060	060	060	060	060	060	060	060	060	060
														17966							17966
Tidal Dry	7639740	0	0	1400 000	2800	4200	12600 000	17826 060	17966 060	17966	17966 060	17966	17966		17966	17966 060	17966	17966 060	17966	17966	
Season					000	000	165342			060		060	060	060	060		060		060	060	060 223304
Lowland Rice	5674788	0	0	7781	8781	105342		202671	212671	223304	223304				223304	223304	223304		223304	223304	
Venth Oamlan				000	000	00	00	00	00	55	55	55	55	55	55	55	55	55	55	55	55
Youth Garden	0	0	0	3000	3000	3000	1200	1350	1350	1417	1417	1417	1417	1417	1417	1417	1417	1417	1417	1417	1417
Tomato				00	00	00	000	000	000	500	500	500	500	500	500	500	500	500	500	500	500
Youth Garden	98000	0	0	9800	9800	9800	9800	9800	9800	1029	1029	1029	1029	1029	1029	1029	1029	1029	1029	1029	1029
Onion		-	-	0	0	0	0	0	0	00	00	00	00	00	00	00	00	00	00	00	00
Women	1500000	0	0	4500	4500	4500	1800	1800	3000	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150
Garden Tomato		-	Ŧ	00	00	00	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
Women	98000	0	0	9800	9800	9800	9800	9800	9800	1029	1029	1029	1029	1029	1029	1029	1029	1029	1029	1029	1029
Garden Onion	00000	0	Ŭ	0	0	0	0	0	0	00	00	00	00	00	00	00	00	00	00	00	00
Total Revenue	19531048	0	0	115270	15327	19880	44930	59265	61605	63875	63875	63875	63875	63875	63875	63875	63875	63875	63875	63875	63875
Total Revenue	10001040	0	0	00	000	200	200	220	220	875	875	875	875	875	875	875	875	875	875	875	875
COST																					
								7187	7187												
Tidal Wet	3547854.78	0	0	5645	1129	1693	5080	722.0	722.0	7387	7387	7387	7387	7387	7387	7387	7387	7387	7387	7387	7387
Season				00	000	500	500	5	5	809	809	809	809	809	809	809	809	809	809	809	809
Tidal Dry	_		_		173560	260340	781020	110496	116020	116020	116020	116020	116020	116020	116020	116020	116020	116020	116020	116020	116020
Season	0	0	0	867800	0	0	0	10.62	91.15	91.15	91	91	91	91	91.2	91	91	91	91	91	91.15
				321199	362479	434851	682531	836625	836625	878457	878457	878457	878457	878457	878457	878457	878457	878457	878457	878457	878457
Lowland Rice	8366258.88	0	0	6.8	6.8	7.76	7.8	8.88	8.88	1.824	1.8	1.8	1.8	1.8	1.82	1.8	1.8	1.8	1.8	1.8	1.824
Youth Garden				1072	1072	1609	6436	1072	1072	1126	1126	1126	1126	1126	1126	1126	1126	1126	1126	1126	1126
Tomato	0	0	0	8	8	2	8	80	80	44	44	44	44	44	44	44	44	44	44	44	44
Youth Garden				1072	1072	1072	1072	1072	1072	1126	1126	1126	1126	1126	1126	1126	1126	1126	1126	1126	1126
Onion	0	0	0	8	8	8	8	8	8	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Women				1501	1501	1501	4004	4504	4729	4729	4729	4729	4729	4729	4729	4729	4729	4729	4729	4729	4729
Garden Tomato	0	0	0	5	5	5	0	5	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25
Women				1072	1072	1072	1072	1072	1072	1126	1126	1126	1126	1126	1126	1126	1126	1126	1126	1126	1126
Garden Onion	0	0	0	8	8	8	8	8	8	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
	11914113.6			469149	653659	869798	198418	267773	273321	279569	279569	279569	279569	279569	279569	279569	279569	279569	279569	279569	279569
Sub-Total Cost	6	0	0	6	5.8	0.76	82	72.6	05.3	42.03	42	42	42	42	42	42	42	42	42	42	42
	0			0	5.0	0.70	02	12.0	00.0	42.00	74	74	74	74	72	74	74	74	74	72	72

#### The Gambia National Agricultural Land and Water Management Development Project (NEMA Chosso) Project completion report Appendix 4: IRR

	7616934.34																				
INVESTMENT																					1
NEMA		45529 0.97	95701 4.49	15534 76.91	38509 71.5	46581 08.18	70323 87.6	54377 79.03	11025 89.52												
CHOSSO		0	0	0	99591. 25	51118 2.77	11223 55.2	17564 03.73	55583 8.85												
OPERATING COSTS																					
NEMA		4552 91	9570 14	1553 477	3850 972	4658 108	7032 388	5437 779	1102 590												
CHOSSO					9959 1	5111 83	1122 355	1756 404	5558 39												
TOTAL COST		910581. 97	191402 8.49	779844 9.71	144377 21.55	190365 62.71	361513 68	411657 38.31	306489 62.7	279569 42.03	279569 42	279569 42	279569 42	279569 42	279569 42	279569 42	279569 42	279569 42	279569 42	279569 42	279569 42.03
		1.00	0.91	0.83	0.75	0.68	0.62	0.56	0.51	0.47	0.42	0.39	0.35	0.32	0.29	0.26	0.24	0.22	0.20	0.18	0.16
Net Benefit With Project		- 91058 1.97	- 19140 28.5	372855 0.29	889278. 45	843637. 29	877883 2.4	180994 81.69	309562 57.3	359189 32.98	359189 33	359189 33	359189 33	359189 33	359189 33	359189 33	359189 33	359189 33	359189 33	359189 33	359189 32.98
Net Benefit Without Project		- 85275 16.31	- 95309 62.8	- 38883 84.1	- 67276 55.89	- 67732 97.05	116189 8.1	104825 47.35	233393 22.96	283019 98.64	283019 99	283019 99	283019 99	283019 99	283019 98.6	283019 99	283019 99	283019 99	283019 99	283019 99	283019 98.64
EIRR	28%	- 852751 6.31	- 866364 5.2	- 321180 5.2	- 505246 9.573	- 462616 1.885	721538. 7	591215 6.705	119730 72.68	132170 33.36	120000 47	109245 71	990569 9.5	902833 7.6	820757 9.6	744342 5.6	676417 7.7	616983 5.7	560379 5.7	509435 9.8	464152 7.776
NPV	\$152,338,686 .80																				
	19%																				

Intervention Area	2013	2014	2015	2016	2017	2018	2019	2020
Tidal Infrastructure	0	0	0	40	100	300	431.5	431.5
Lowland A -Tidal Access	0	0	1,000.00	2,000.00	3,000.00	9,000.00	12,732.90	12,732.90
Lowland B- Inland valleys	0	0	6,781.00	6,781.00	7,534.20	7,534.20	7,534.20	7,534.20
Total Lowland	0	0	7,781.00	8,781.00	10,534.2 0	16,534.20	20,267.10	20,267.10
Garden Youth	0	0	20	20	20	20	20	20
Garden Women	0	0	25	25	25	100	145	145

Table 4: Area under cultivation by intervention by Year

# Production Model: Lowland Rice

		PRODUCTI	ON		FINANCIA	L VALUES (G	MD)
		Unit	Without Project	With project	Unit cost	Without Project	With project
Main Production							
Output F	Rice (Paddy)	kg/ha	700	2,500	20	14,000	50,00
Operating							
Inputs							
Seeds							
Farm saved		kg/ha	60		20	1,200	
Improved se		kg/ha		30	5	-	1,05
Fertilizers &	Plant Protection (if an	<u>y)</u>					
Fertiliser							
1	NPK	kg/ha	75	200	15	1,125	3,00
ι	JREA	kg/ha	75	150	15	1,125	2,25
Fungicides		litre/ha					
Sub-total See	eds, Fertilisers and Plar	nt Protection				3,450	6,30
Field Services							
Tractor Plou	ghing	ha	1	1	2,400	2,400	2,40
Hired labour		pers-day					
Cultivation (H	Harrowing)	ha			-	-	
Furrowing		ha					
Harvesting		ha	1	1	2,400	2,400	2,40
Threshing (1	0% of qty. threshed)	kg	70	250	20	1,400	5,00
Transport to	homestead	50 kg bag	14	50	20	280	1,00
Sub-total Fie	ld Services					6,480	10,80
-			1		1		
Other Costs							
9	Sacks, etc.	no.	14	50	15	210	75
Sub-total Ot	her Costs					210	75
Total Purchased	l Inputs					10,140	17,85
Net Revenue per h	а					3,860	32,15
ncremental reven	ue per ha						28,29
-			•		1		
Family Labour D							
Land prepara		day	12.5	12.5	150	1,875	1,87
	ving & maintenance	day	2.5	2.5	150	375	37
Transplantin		day	10	12	150	1,500	1,80
Fertilizer NPI		day	1	2	150	150	30
	a application	day	1	1.5	150	150	22
Weeding		day	18	15	150	2,700	2,25
Bird Scaring		day	25	25	150	3,750	3,75
Total Labour			70	71		<u>10,500</u>	<u>10,57</u>
Returns per family l	•					55	45
	s per family labour da	Y					40
Total Cost						<u>20,640</u>	<u>28,42</u>

# Production Model: Tidal Rice Dry Season Crop

	PRODUCTI	ON	FINANCIA (GMD)	L VALUES
	Unit	With project	Unit cost	With project
Main Production				
Output Rice (Paddy)	kg/ha	3,500	20	70,000
Operating				
Inputs				
Seeds				
Purchased seed (if any)	kg/ha	50	50	2,500
Fertilizers & Plant Protection (if any)				
Fertiliser				
NPK	kg/ha	400	15	6,000
UREA	kg/ha	250	15	3,750
Fungicides	litre/ha			
Sub-total Seeds, Fertilisers and F	Plant Protection			12,250
Field Services				
Tractor Ploughing	ha	1	2,400	2,400
Hired labour	pers-day			
Cultivation (Harrowing)	ha	1	-	-
Furrowing	ha			
Harvesting	ha	1	2,400	2400
Threshing (10% of qty. threshed)	kg of rice	350	20	7000
Transport to homestead	50 kg bag	70	2	140
Sub-total Field Services				11,940
Other				
Costs				
Sacks, etc.	no.	70	15	1,050
Sub-total Other Costs				1,050
				,
Total Purchased Inputs				25,240
Net Revenue per ha				44,760
Incremental revenue per ha				44,760
Family Labour Dava yan Ua				
Family Labour Days per Ha	dov	40	150	4075
Land preparation	day	13	150	1875
Nursery, sowing & maintenance	day	3	150	375
Transplanting	day	25	150	3750
Irrigation	day	35	150	5250
Fertilizer NPK application	day	25	150	3750
Fertilizer Urea application	day	1	150	150
Weeding	day	10	150	1500
Bird Scaring	day	10	150	1500
Total Labour				18150
Total Family Labour	pers-day	121		
Returns per family labour day				
Returns per labour day				370
Incremental returns per family labour day				370
Total Cost				43,390

			PRODUCTIO	ON N		FINAN	CIAL VALUES	S (GMD)
			Unit	Without	With	Unit	Without	With
				Project	project	cost	Project	project
<u>Main</u>								
<u>Productio</u>	n							
Out	tput	Rice	kg/ha	1,500	3,000	20	30,000	60,000
Operating								
Inp	uts							
	Seeds							
	Farm sa		kg/ha	65		20	1,300	-
		sed seed (if any)	kg/ha		50	35	-	1,750
		ers & Plant Protection (if any	/)					
	Fertilise	r						
	NPK		kg/ha	150		15	2,250	-
	UREA		kg/ha	125		15	1,875	-
		les/insecticides	litre/ha					
	Sub-tot	al Seeds, Fertilisers and Plan	t Protection	1			<u>5,425</u>	<u>1,750</u>
	Field Se							
		Tractor ploughing (if any)	ha		1	2,400	-	2,400
		Hired labour	pers-day				-	-
		Cultivation (Harrowing)	ha		1	-	-	-
		Furrowing	ha					
		Harvesting	ha	1	1	2,400	2,400	2,400
		Threshing (10% of qty. threshed)	kg of rice	150	300	20	3,000	6,000
		Transport to homestead	50 kg bag	30	60	20	600	1,200
	Sub-tota	al Field Services					6,000	12,000
	Other C	osts						
		Sacks, etc.	no	30	60	15	270	750
	Sub-tot	al Other Costs					270	<u>750</u>
Tot	al Purch	ased Inputs					<u>11,695</u>	14,500
Net Reven	nue per	ha					18,305	45,500
Increment	tal reve	nue per ha						27,195
Fan	nily Labo	our Days per Ha						
	Land pr	eparation	day	12.5	12.5	150	1,875	1,875
	Nursery	, sowing & maintenance	day	2.5	2.5	150	375	375
	Transpla	anting	day	10	15	150	1,500	2,250
	Irrigatio	n	day	8	15	150	1,200	2,250
	Fertilize	r NPK application	day	1.5	4	150	225	600
	Fertilize	r Urea application	day	1.5	2.5	150	225	375
	Weedin	g	day	18	15	150	2,700	2,250
	Bird Sca	ring	day	25	25	150	3,750	3,750
	Total La	bour		79	92		<u>11,850</u>	<u>13,725</u>
Returns p	er labou	ır day					232	497
Increment	al retur	ns per family labour day						266
Total Cost							23,545	28,225

# Production Model: Tidal Rice Wet Season

		PRODUCTION		FINANCIAL	VALUES (GMD
		Unit	With project	Unit cost	With project
Main Production					
Output	Onion	kg/ha	14,000	35	490,00
Operating					
Inputs					
Seeds					
	Purchased seed	kg/ha	2	3,000	6,00
Fertilizers 8	& Plant Protection (if any)			-	
	Fertiliser				
	NPK	kg/ha	400	15	6,00
	UREA	kg/ha	280	15	4,20
	Fungicides	litre/ha			,
Sub-total S	eeds, Fertilisers and Plant Protect				16,20
Field Servio					
	Hired labor	pers-day			
	Irrigation Maintenance	ha	1	1,600	1,60
	Furrowing	ha			
Sub-total F	ield Services				1,60
Other Cent	-				
Other Cost			770	10	0.24
	Sacks, etc.	onion bags	778	10	8,34
Sub-total C	other Costs				8,34
Total Purchase	ed Innuts				26,14
Net Revenue per	-				463,86
Incremental reve					463,86
incrementarrevel					405,80
Family Labor [	Days per Ha				
Total Labor	ur	pers-day			
Total Famil	ly Labour	pers-day			
	Seed bed preparation	day	4	150	
	Land preparation -hand		30	150	
	transplanting		20	150	
	Watering/irrigation		36	150	
	Fertilizer NPK application		8	150	
	Fertilizer Urea application		6	150	
	Weeding		60	150	
	Harvesting	day	10	150	
	Post-harvest operations	day	45	150	
Total Labo	-	pers-day	219	150	32,85
Total Famil		pers-day	219	100	22,00
Returns per famil	-	pero day	215		
Returns per labo					2,11
	rns per family labour day				2,11
Total Cost					55,24

# Production Model: Onion - Youth Garden

		PRODUCTIC	DN	FINANCIAL VA	LUES (GMD)
		Unit	With project	Unit cost	With project
Main Production					
Output	Tomato	kg/ha	30,000	50	1,500,000
Operating					
_ Inputs					
Seeds					
	Farm saved	kg/ha			
	Purchased seed (if any)	kg/ha	1	4,000	4,000
Fertilize	rs & Plant Protection (if any)				
	Fertiliser		100		
	NPK	kg/ha	400	15	6,000
	UREA	kg/ha	280	15	4,200
	Fungicides	litre/ha			
Sub-tota	I Seeds, Fertilisers and Plant Protect	ion			14,200
Field Se	rvices				
	draught animal power (if any)	days			
	Hired labor	pers-day			
		p 0.0 00.)			
	Irrigation Maintenance	ha	1	1,600	1,600
	Furrowing	ha		-	
Sub-tota	I Field Services			-	<u>1,600</u>
01					
Other					
Costs	Caska ata				
Cub tata	Sacks, etc. I Other Costs				
50D-101a	I Other Costs				
Total Purcha					<u>15,800</u>
Net Revenue per h					1,484,200
Incremental rever	nue per ha		_		<u>1,484,200</u>
Family Labor	ur Days per Ha				
	Seed bed preparation	day	4	150	
	Land preparation	day	30	150	
	Land preparation -hand	day	20	150	
	transplanting	day	15	150	
	Watering/irrigation	day	36	150	
	Fertilizer NPK application	day	8	150	
	Fertilizer Urea application	day	6	150	
	Weeding	day	45	150	
	Harvesting	day	75	150	
Total Lat		pers-day	239	150	<u>35,850</u>
Total Fa	mily Labour	pers-day	239		
Returns per family	•				
Returns per labo					<u>6,210</u>
	s per family labour day				6,210
Total Cost					51,650

# Production Model: Tomato - Youth Garden

# Production Model: Onion - Women Garden

	PRODUCTION			FINA	VCIAL VALUE	S (GMD)
	Unit	Without	With	Unit cost	Without Project	With
Main	Unit	Project	project	COSL	Froject	project
Main       Production       Output     Onion       Operating       Inputs       Seeds	kg/ha	700	14,000	35	24,500	490,000
Purchased seed Fertilizers & Plant Protection (if	kg/ha	1	2	3,000	3,000	6,000
any) Fertiliser NPK UREA Fungicides Sub-total Seeds, Fertilisers and Plan Protection	kg/ha kg/ha litre/ha nt	100 70	400 280	15 15	1,500 1,050 <u>5,550</u>	6,000 4,200 <u>16,200</u>
Field Services Hired labor Irrigation Maintenance Furrowing	pers-day ha ha	-	1	1,600	-	1,600
Sub-total Field Services					=	<u>1,600</u>
Other Costs				-		
Sacks, etc. Sub-total Other Costs	onion bags	39	778	10	5,010 <u>5,010</u>	8,340 <b>8,340</b>
Total Purchased Inputs Net Revenue per ha Incremental revenue per ha					<u>10,560</u> <u>13,940</u> -	<u>24,540</u> <u>465,460</u> <u>451,520</u>
Family Labor Days per Ha						
Total Labour	nore day					
Total Family Labour	pers-day pers-day				-	
Seed bed preparation Land preparation -	day	2	4	150		
hand transplanting Watering/irrigation Fertilizer NPK	day day day	10 10 48	30 20 36	150 150 150		
application Fertilizer Urea	day	2	8	150		
Pertilizer Orea application Weeding Harvesting Post-harvest	day day day	2 40 7	6 60 10	150 150 150		
operations Total Labour <i>Total Family Labour</i> Returns per family labour day	day pers-day pers-day	35 156 156	45 219 219	150 150	<u>29,100</u>	<u>18,500</u>

Returns per labour day Incremental returns per family labour		90	2,993
day Total Cost		<u>39,660</u>	<u>2,904</u> <u><b>43,040</b></u>

	odel: Tomato - Women Ga	PRODUCTION			FINANCIAL VALUES (GMD)		
			Without	With	Unit	Without	With
		Unit	Project	project	cost	Project	project
Main Production							
Output	Tomato	kg/ha	800	30,000	50	40,000	1,500,000
Operating							
Inputs							
Seeds							
	Farm saved	kg/ha					
	Purchased seed (if any)	kg/ha	0.3	1	4,000	1,200	4,000
Fertilizers & Plant Protection (if any)		_					
	Fertiliser						
	NPK	kg/ha	100	400	15	1,500	6,000
	UREA	kg/ha	70	280	15	1,050	4,200
	Fungicides	litre/ha					
Sub-total See	ds, Fertilisers and Plant Prote					3,750	14,200
Field Services							
i ielu seiviles	draught animal power	days					
	Hired labor	pers-day					
	Irrigation Maintenance	ha		1	1,600		1,600
	Furrowing	ha	-	T	1,000	-	1,600
Sub-total Field Services		IId			_		1,600
					_		1,000
Other Costs							
	Sacks, etc.						
Sub-total Oth	er Costs						
Total Purchased	Inputs					<u>3,750</u>	<u>15,800</u>
Net Revenue per ha						36,250	1,484,200
Incremental revenue per ha						50,250	1,101,200
Family Labour Da							
	Seed bed preparation	day	2	4	150		
	Land preparation	day	10	30	150		
	Land preparation -hand	day	10	20	150		
	transplanting	day	5	15	150		
	Watering/irrigation	day	48	36	150		
	Fertilizer NPK application	day	2	8	150		
	Fertilizer Urea application	day	2	6	150		
	Weeding	day	30	45	150		
	Harvesting	day	20	75	150		
Total Labour		pers-day	129	239	150	<u>19,350</u>	<u>35,850</u>
Total Family Labour		pers-day	129	239			
Returns per family la	abour day						
Returns per labour day						281	6,210
Incremental returns per family labour day							5,926
Total Cost						<u>23,100</u>	<u>51,650</u>





# National Agricultural Land and Water Management Development Project

**Project Completion Report** 

Appendix 5: Environmental social and climate impact assessment (detailed analysis)

 Mission Dates:
 19/10/2020 5/11/2020

 Document Date:
 15/05/2021

 Project No.
 1100001643

 Report No.
 5635-GM

 DSF Grant ID
 2000001124

West and Central Africa Division Programme Management Department

# Appendix 11: Environmental assessment (detailed analysis)

1.





National Agricultural Land and Water Management Development Project

**Project Completion Report** 

Appendix 6: Dates of supervision mission and follow-up missions

 Mission Dates:
 19/10/2020 5/11/2020

 Document Date:
 15/05/2021

 Project No.
 1100001643

 Report No.
 5635-GM

 DSF Grant ID
 2000001124

West and Central Africa Division Programme Management Department

Mission	Dates
Impl. Sup/Follow Up Mission 1	15 April 2013 - 24 April 2013
Supervision Mission 1	24 October 2013 - 29 October 2013
Supervision Mission 2	10 March 2014 - 25 March 2014
Supervision Mission 3	15 September 2014 - 30 September 2014
Supervision Mission 4	09 March 2015 - 23 March 2015
Supervision Mission 5	07 September 2015 - 21 September 2015
Impl. Sup/Follow Up Mission 2	28 November 2015 - 09 December 2015
Supervision Mission 6	11 April 2016 - 25 April 2016
Supervision Mission 7	06 March 2017 - 17 March 2017
Mid-Term Review 1	20 February 2018 - 09 March 2018
Impl. Sup/Follow Up Mission 3	12 November 2018 - 16 November 2018
Supervision Mission 12	30 June 2019 - 15 July 2019
Impl. Sup/Follow Up Mission 4	27 November 2019 - 08 December 2019





National Agricultural Land and Water Management Development Project

**Project Completion Report** 

Appendix 7: Terms of Reference of the completions review mission

 Mission Dates:
 19/10/2020 5/11/2020

 Document Date:
 15/05/2021

 Project No.
 1100001643

 Report No.
 5635-GM

 DSF Grant ID
 2000001124

West and Central Africa Division Programme Management Department

# Appendix: Terms of Reference of the completions review mission

#### Memorandum

TO: Mr. Cheikh Tidiane Sarr, Team Leader (Agronomist) Mr Ibrahima Tonton CISSE, Program Analyst Mr Tetie Bakayoko, Financial Management Specialist Ms. Dounamba Konare, Procurement Specialist Mr. Musa Saihou Mbenga, Consultant Agronomist Mr. Magatte Wade, Consultant Senior Engineer Mr. Abdoulaye Sy Monitoring, Evaluation and Learning (ME&L) Mr. Modou Sarr, Social Inclusion (Gender & Youth Specialist)

#### FROM: Ms Haoua SIENTA Country Director, The Gambia WCA Hub - Dakar

#### DATE: 16 October 2020

#### I. SUBJECT: The Gambia: National agricultural land and water management development project – Terms of Reference for the Project Completion Report Mission, from October 19<sup>th</sup> to November 12<sup>th</sup> 2020

#### Introduction

IFAD and The GoTG will undertake the proposed project completion review for the NEMA Project jointly. Its main purpose is to report on the results achieved through project interventions for accountability and learning purposes. The process should also help reflect on performance, elicit lessons learned and define an appropriate hand-over or post-project strategy.

The project completion review will take place from October 19<sup>th</sup> to November 12<sup>th</sup>, 2020. It will be held in two steps: the first part of the mission will be on the ground in Banjul from 19<sup>th</sup> to 30<sup>th</sup> October and then the second part virtually from 2<sup>nd</sup> to 12<sup>th</sup> November 2020.

The completion review process should be guided by the methodological framework set out in IFAD Project Completion Review Guidelines, while the present TOR describe the detailed objectives, timeline and deliverables of the completion review mission. In country, the work of the PCR team will be facilitated by the PSU and the CPCU, under the overall supervision of the Ministry of Agriculture of the Gambia.

#### II. Background

The National Agricultural Land and Water Management Project (NEMA), approved by IFAD in December 2012, became effective in December 2012 and it completed in June 30<sup>th</sup> 2020. Its overall development objective is to reduce the poverty of rural women, men and youth (23,560 households) by increasing income through improved productivity based on sustainable land and water management practices. This was to be achieved through the implementation, in all six Agricultural Regional Directorates along the River Gambia, of three main components: i) watershed development, ii) agricultural commercialization; and iii) project facilitation. The first component focusses on investments in public and communal economic assets while the second complements the first component with investments in private economic assets of producer organizations and enterprises.

An ASAP grant (Chosso) was approved by IFAD in December 2015 to enhance NEMA activities in expanding smallholder farmers coping options with climate change within the framework of the National Adaptation Plan of Actions.

**Component 1: Watershed development**. The intended outcome is the improved productivity of scarce agricultural lands, to be achieved by purposeful investments in land and water resources, vegetable gardens and access roads, coupled with the capacity of farmers to manage the productive assets within their watershed. The main activity is substantial investment in public economic infrastructure including water control structures, access roads and markets.

**Component 2: Agricultural commercialization**. The outcome is a sustained uplift in the level of agricultural business activity in profitable primary production and the supply of support services such as mechanical land preparation, rice milling and transport by both youth-led enterprises and producer organisations.

**Component 3: Project facilitation.** A Project Support Unit under the auspices of the Central Project Coordination Unit within the Ministry of Agriculture would be responsible for project management, mainly the supervision of performance-based contracts, and some direct implementation support. A particular feature of NEMA would be building up the Government's internal capacity to plan, monitor and evaluate investments and interventions in the sector, and to generate and use knowledge products for evidence-based policy dialogue.

**Project cost and financing.** Total project costs are USD 65.0million, financed with IFAD grants and concessionary loans from Islamic Development Bank and one African Development Bank.

#### III. Objectives of the mission

The overall objective of the NEMA completion mission is to assess and report on all the delivery performance of the project and the achievements. This process requires an informed assessment of the relevance, effectiveness, efficiency and sustainability of the project's achievements. More specifically, the specific objectives of the completion process include the following:

- To assess the relevance of project interventions at the time of project design and in today's context.
- To assess the effectiveness of project implementation, or the extent to which project objectives were met, and to document the immediate results and impacts of project interventions.
- To review the project costs and benefits and the efficiency of the overall project implementation process, including IFAD's and partners' performance
- To assess the prospects of sustainability of project benefits beyond project completion
- To generate and document useful lessons from implementation that will help improve IFAD's or Borrower's future programming and designs.
- To identify any potential for the replication or up-scaling of best project practices
- Lessons learned and recommendation regarding staff qualifications and selection

#### A. METHODOLOGY

The mission will use a mix of quantitative and qualitative tools in order to form an informed judgement on overall project performance and results. For transparency and accuracy purposes, it is important that the consultation with project stakeholders should be as large and inclusive as possible and the list of persons to be met by the mission will require careful consideration.

Primary sources of information will include project reports and documents (supervision reports, MTR report, progress reports, AWPB, etc.), M&E and MIS data (including log frame data), any surveys or specific studies undertaken by the project, PMU and service providers' records and the records of the groups supported by the project. These sources will be used extensively in order to generate quantitative information on project results or estimate project efficiency.

The mission's working methodology will include, among other things: (i) in-depth analysis of existing project documentation; (ii) limited but very targeted field visits and discussions with well-targeted actors on well-identified themes; (iii) in-depth discussions with the project support unit and the various implementing partners including CPCU, MoA, AfDB, and finally (iv) sharing of main findings and recommendations of the mission with the PSU and other partners involved in the implementation of NEMA.

#### B. Composition of the project completion review team

**Ms Haoua Sienta, Country Director and Head of mission:** As Head of Mission, she will ensure the overall coordination of the mission. She will distribute specific tasks to members and ensure the smooth operation of activities. She will ensure the coherence of the mission members' contributions and conduct dialogue with government authorities, NEMA PMUs and other stakeholders.

**Mr. Cheikh Tidiane Sarr, Team Leader (Agronomist)** will assume the function of Senior Technical Consultant in support of the Country Director for the mission in general and will assume the specific coordination of the NEMA implementation support mission. He will coordinate the work of the team members and assist them in the implementation of their terms of reference. The Head of Mission will ensure that the mission delivers the outputs on time, in terms of quality and according to the established schedule. He will be responsible for the coordination, general supervision of the mission, drafting of the report and its presentation to the Government.

The team lead will have the overall responsibility for delivering the outputs outlined in the terms of reference for the Mission. He will guide the overall completion review process and consolidate inputs from other team members into the IFAD PCR template. Specifically, this would include the following tasks:

- Overall coordination of the mission, including the review of overall project implementation, performance and evolving issues.
- Manage the other team members, their contributions and sector specific outputs, as well as the locally hired coordinator.
- Manage information sharing and day to day dialogue with donors, including Government of The Gambia and other stakeholders.
- Prepare mission schedules, meeting and information requests, and introductory material, in cooperation with Project Director and his Team or Assignees.
- Prepare detailed data request following completion of inception report, with input from other consultants.
- Organize introductory and wrap-up workshops.
- Prepare the inception report based on the terms of reference, and interviews with stakeholders. The report should set out the methodology and approach to the evaluation, including how to evaluate the criteria and questions, their feasibility in the light of the situation, methods and data requirements. In addition, the report should propose specific ways of ensuring that the findings are practical and targeted, and present ways of addressing risks mentioned in the overall TOR.
- Prepare the draft evaluation report and a short PowerPoint outlining key findings and lessons learned.
- Prepare the final report based on comments on the first draft from donors and provide justification for comments not incorporated.
- Prepare a summary report of the key mission's findings, recommendations and follow-up actions to be shared with stakeholders during wrap-up meeting;
- Collate and prepare lessons learned and propose as appropriate recommendations for consolidation and up scaling.

**Mr. Ibrahima Tonton Cissé, Program Analyst IFAD**, He will support the Country Director for the overall coordination of the mission and contact with the government. Particularly, he will be responsible for the KM and Communication aspects; He will assess the progress of the Project's exit strategy and the sustainability mechanisms put in place. At the end of the analysis, He will make key recommendations needed on the monitoring and evaluation system and the Project's exit strategy

**Mr. Saihou Mbenga (agronomist consultant)** will review the activities related to agricultural commercialization and will assess the performance of the value chain actors:

- the evaluation of partnership opportunities, the level and quality of value chain actors' interaction and the contribution of their business/social engagement to their income improvement;
- the analysis of the investment opportunities, the orientation of business development services delivery and the rural enterprises effectiveness in decent job creation for participating youth;
- the development of financial inclusion aspect of NEMA especially how to facilitate farmers' access to inputs (certified seeds, fertilizers, pesticides, and small equipment) and youth access to entrepreneurship financing (SMEs);
- the assessment of NEMA engagement with different institutions, partners, private sector including farmer organizations.

#### On the infrastructure aspects, he will review the:

- The progress made since the MTR on infrastructures realization and a watershed management 
  The planning, design and implementation of civil works.
- the design documents handed over to the mission for tidal irrigation schemes combined with observations made during the field visits
- Conduct any other task identified during the mission related to the infrastructures

**Mr Tetie Bakayoko Financial Management Specialist:** Lead for financial administration and fiduciary management for all funding including ASAP. Her tasks will be to assess the quality of the financial and accounting management of the project, to evaluate the quality of the procedures for the procurement of goods, works, services for each source of funding, and will be responsible for all aspects related to procurement and contract management. Her specific tasks will include:

- Verify compliance and adherence to the provisions of the Financing Agreement and the Letter to the Borrower;
- Review the progress of financial implementation for each component against the pre-evaluation report forecasts;
- Lessons learned regarding staff qualifications and selection (competitive process or appointment, necessary qualifications qualified accountants), selection/relevance of external auditors, etc.;
- Flow of funds and disbursement: Challenges encountered at disbursement level, project experience with bottlenecks or other problems in the flow of funds. Suggestions for improving the flow of funds in the future (e.g., types of financial institutions, central/commercial bank, treasury, etc.).
- Analyse the performance of the system of making resources available to partners on the basis of the agreements;
- Analyse with the PSU and the partners, the difficulties and constraints encountered in making resources available to partners and define useful shortcomings that will contribute to the improvement of resource management by ROOTS;
- Assess the overall performance in the application of the project manuals (administrative, financial and accounting, micro-project manual and M&E manual) with a view to efficient financial and internal control;
- Assess the financial management of the sub-projects;
- Planning of closure activities: plan for submission of DRFs, final audit report, transfer of assets, cash flow projection, submission of project files, etc.

### C. Ms. Dounamba Konare, Procurement Specialist IFAD

Assess project procurement processes and providing advice accordingly;

- Carry out spot checks on past procurement and assess to the extent these adhere to Government and IFAD procurement rules; in particular, verify that the goods, services and works procured under the NEMA correspond with the approved AWPB and procurement plan, in terms of quality and quantities. The expert shall review and advise on the tender documents and evaluation report for all procurement processes
- Review the quality of contract management, including technical approval for payments, and maintenance of up-to-date the contracts' register and Contract Monitoring Forms (CMFs);
- Assess the procurement thresholds for prior review as stated in the Letter to the Borrower and recommend any changes, if any, that would contribute to more efficient project implementation

#### D. Mr. Abdoulaye Sy (Monitoring, Evaluation and Learning (ME&L) Specialist)

- Review the available data annual RIMS reports as well as from the Baseline and endline surveys in order to compile tables and graphs of key RIMS indicators for inclusion in the PCR.
- Review project's results log frame and tracking tool to ascertain achievements, including but not limited to progress reports (quarterly and annual) and other monitoring/evaluation and reporting tools;
- Compile listing of available Knowledge Management products, lessons learnt and propose a strategy for their wide-scale dissemination;
- Review and determine the appropriateness of the project annual work planning and budgeting mechanisms
- Contribute to the Mission Report and Aide Memoire and participate in wrap-up meetings on the basis of the Aide Memoire

#### E. Mr. Modou Sarr, Social Inclusion (Targeting, Gender and Youth Specialist)

- Assess the effectiveness of the project strategy and partnerships for mobilizing women and youths to participate profitably in the project.
- · Assess the relevance of specific project investments (vegetable and rice value chains) to women
- Determine the effectiveness of rural enterprise initiatives in gainful employment creation for youths and women
- Evaluate the extent of youth access to agricultural entrepreneurship financing
- Contribute to the Mission Report and Aide Memoire and participate in wrap-up meetings on the basis of the Aide Memoire

#### F. Mr. Magatte Wade – (Irrigation and Infrastructure Engineering Specialist)

- · Assess the appropriateness of mechanisms for the evaluation and award of civil works contracts
- Assess the relevance and appropriateness of project investments in irrigation and infrastructure facilities
- · Evaluate the suitability of the irrigation and infrastructure designs
- Determine the appropriateness and effectiveness of quality control and monitoring mechanisms for all civil works
- Assess the sustainability of project irrigation and infrastructure facilities
- Contribute to the Mission Report and Aide Memoire and participate in wrap-up meetings on the basis of the Aide Memoire

**Officials from the Government (Ministry of Agriculture)** and the FO representative will participate fully in the mission, including in the drafting of the aide-memoire and the mission report. Depending on their areas of expertise, they will be co-responsible for the mission's objectives.

#### G. Documents to be provided to by IFAD

The following documents will be provided to all team members no later than 2 weeks before the start of the mission:

• NEMA AWPB and PP 2018/19

- NEMA financing agreement
- NEMA Letter to the Borrower
- NEMA Project Implementation Manual
- NEMA Progress Report
- Any relevant studies produced by NEMA
- IFAD's template for Aide Memoire and Project Completion Report guideline.

#### H. Documents to be provided to by NEMA

All projects documents needed for the mission completion.





# National Agricultural Land and Water Management Development Project

**Project Completion Report** 

Appendix 8: List of person met and mission's programme

 Mission Dates:
 19/10/2020 5/11/2020

 Document Date:
 15/05/2021

 Project No.
 1100001643

 Report No.
 5635-GM

 DSF Grant ID
 2000001124

West and Central Africa Division Programme Management Department

The Gambia National Agricultural Land and Water Management Development Project (NEMA Chosso) Project completion report Appendix: List of persons met

2012	2013	2014	2015	2016	2017	2018	2019	
2020								
12 <sup>th</sup> – 24 <sup>th</sup> April 2012	DSM 14 <sup>th</sup> – 29 Oct	DSM 10 <sup>TH</sup> – 25 <sup>TH</sup> March 2014	ASAP 26 <sup>th</sup> – 31 <sup>st</sup> Jan 2015 Field Visit 1 <sup>st</sup> - 14 <sup>th</sup> Feb 2015	DSM 1 <sup>st</sup> – 2 <sup>nd</sup> March 2016	DSM 6 <sup>th</sup> – 17 <sup>th</sup> March 2017	MTR Mission 20 <sup>th</sup> Feb – 9 <sup>th</sup> March 2018	IFAD / FAO Mission 19 <sup>th</sup> Jan – 8 <sup>th</sup> Feb 2019	IFAD GEF Delegation 28 <sup>th</sup> Jan 2020
19th May - 9th June 2012	-	-	DMS 24 <sup>th</sup> – 14 <sup>th</sup> Feb 2015	JISM 11 <sup>th</sup> – 25 <sup>th</sup> April 2016	Financial Management Implementation & Support Mission 8 <sup>th</sup> – 18 <sup>th</sup> May 2017	Maiden Visit Mr. Jean Pascal Kabore & Ms. Haoua Sienta 8 <sup>th</sup> – 9 <sup>th</sup> August	DSM 30 <sup>th</sup> June – 15 <sup>th</sup> July 2019	19 <sup>th</sup> – 28 <sup>th</sup> Oct 2020 NEMA PCR Mission
26th July – 7th Aug 2012		DISM 15 <sup>th</sup> – 30 <sup>th</sup> Sep 2014	DMS 9 <sup>th</sup> – 23 <sup>rd</sup> March 2015	-	-	COSOP Preparatory Mission 10 <sup>th</sup> – 12 <sup>th</sup> Oct 2018	19 <sup>th</sup> – 20 <sup>th</sup> Nov 2019 Ambassadors Visit	2 <sup>nd</sup> – 12 Dec 2020 Virtual Meetings
	-	IFAD President Visit 20 <sup>th</sup> – 22 <sup>nd</sup> August 2014	The Gambia CPE Mission Mission Team arrived 3 <sup>rd</sup> , 6 <sup>th</sup> and 10 <sup>th</sup> April 2015 End Date 30 <sup>th</sup> April 2015	-	-	COSOP Mission 17 <sup>th</sup> – 26 <sup>th</sup> Oct 2018	Follow-Up Mission 27th Nov – 9th Dec 2019	-

#### The Gambia National Agricultural Land and Water Management Development Project (NEMA Chosso) Project completion report Appendix 6: Summary of amendments to the loan agreement

-	IFAD Country	DSM	-	-	COSOP	-	-
	Prog Eval	20 <sup>th</sup> – 30 <sup>th</sup> April			Validation		
	Mission	2015			Mission		
	8-12 <sup>th</sup> Dec				28 <sup>th</sup> Nov 2018		
	2014						
-	-	CPA – JISM	-	-	-	-	-
		7 <sup>th</sup> – 21 <sup>st</sup> Sept					
		2015					





# National Agricultural Land and Water Management Development Project

**Project Completion Report** 

Appendix 9: Final wrap-up/stakeholder workshop findings

 Mission Dates:
 19/10/2020 5/11/2020

 Document Date:
 15/05/2021

 Project No.
 1100001643

 Report No.
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 DSF Grant ID
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West and Central Africa Division Programme Management Department







OF THE GAMBIA

National Agricultural Land and Water Management Development Project ( (*Nema*) Ministry of Agriculture – Abuko Veterinary Complex – KMC - The Gambia Tel: (+220- 996 0072 Email: <u>modoujl@gmail.com</u> / info@nema.gm

### MINUTES OF MEETING

### IFAD PCR MISSION & Nema-Chosso PSU

Date of meeting:	13 <sup>th</sup> December 2020
Meeting Venue:	Tamala Conference Hall
Chair:	Lamin Fatajo – a.i Project Director
Secretary:	Ms. Elizabeth Loum – AAO –Nema

### A. ATTENDANCE

NO	NAME	DESIGNATIUON/ INSTITUTION
1.	Mrs. Amie Fabureh	Minister of Agriculture
2.	Mr. Dibbah	Minister of Environment, Climate Chance and Natural Resources
3.	Mr. Abdoulie Mbye	Procurement Specialist
4.	Mr. Ibrahima Tonton Cisse	Program Analyst
5.	Ms. Haoua Sienta	IFAD Country Director
6.	Mr. Lamin Fatajo	Project Director
7.	Elizabeth Loum	Assistant Admin. Officer
8.	Mr. Alagie B. Jabang	Financial Controller
9.	Dr. Mohamed Kebbeh	WARF Director
10.	Mr. Alieu Sowe	NACOFAG

### **Opening Session**

Mr. Fatajo led the opening session of the Meeting with an invitation to silent prayers, followed by a welcome remark to the Mission team members.

In the welcoming remarks, the acting Director thanked all participants for responding to the invitation. After announcing that the achievements of NEMA Chosso were considered satisfactory overall, he then presented very briefly the history of the NEMA, which effectively started its activities in 2012.

### Mrs. Amie Fabureh, Minister of Agriculture

She commended the participants and efforts made by all the project staff to achieve the satisfactory results obtained by the project during these 7 years of implementation. She recalled the importance that the government attaches to agricultural development and the NEMA project has contributed to the achievement of the government's development objectives.

### Mr. Dibbah, Minister of the Environment

He was delighted to have been associated with the official closing ceremony of the project. His ministerial department has been heavily involved in the implementation of ASAP funding for climate change adaptation. The NEMA project and its results must be set as an example throughout the country, said the minister.

### Mrs. Haou Sienta, IFAD Country Director

She has at the beginning of her statement express her sincere thanks on behalf of IFAD's WCA Director, on behalf of the IFAD President and on her own behalf, to the Honorable Governor of Gambia to IFAD, the Honorable Minister of Finance, UNCT colleagues, and all implementing partners who participated in making the project a complete success.

She has encouraged all partners in ensuring the capitalization of the experiences and achievements of the NEMA project to multiply the actions on the fields. This is the overall objective of the new 80 million dollar 'ROOTS' project.

She has briefly explained the IFAD's engagement with the Gambian government that dated back to 1982. Almost 38 years of trust and collaboration. In that period of 38 years, more than 10 projects have been formulated and implemented to the great benefit of our most vulnerable populations.

### Dr Mohamed Kebbeh, Director of WARF

The partnership between WARF and NEMA has been a total success in all respects. WARF was fortunate to be involved in project formulation, implementation and completion. This is a testimony to the frank and sincere collaboration that has existed between our two entities during the last seven years of implementation.

### Mr. Alieu SOWE, representative of NACOFAG

Farmer's organizations have long collaborated with the Gambian government and the NEMA project in particular. Peasant organizations have been strongly involved in the whole process of project implementation. Capacity building programs have been organized for the several organizations that make up NACOFAG. It is therefore with great satisfaction that the farmers' organizations take part in this closing ceremony of NEMA that has had a huge impact on the lives of the most vulnerable populations.

Key Lessons	Key Perspectives for ROOTS
Pre-bid meetings and other support are necessary to strengthen local capacity, but this requires time and flexibility	SSTC especially targeting partnership between local and Senegalese firms
Irrigation capacity is fundamental to effective and sustainable infrastructure designs and works	Recruit an Irrigation Engineer for PSU; Policy dialogue with MoA to improve national capacity
Access to spare parts is crucial for continuity of civil works in the field	Public-Private-Producers-Partnerships (4Ps) and SSTC to improve access to spare parts
Improved design of CISF (from 45:55 to 60:40 + start-up support)	Support to business plan preparation and post investment coaching and mentorship

The Minister of Agriculture who thanked the expert team of the mission and all participants for the fruitful exchanges closed the meeting at 14:00. She invited everyone to commit themselves to the implementation of the recommendations resulting from the meeting.

# National Agricultural Land and Water Management Development Project (Nema)

### OFFICIAL CLOSING CEREMONY

### December 13th, 2020 – Tamala Hotel Conference Hall

### AGENDA

	Monday 13 December 2020					
9:00	9:30	Registration of the Guests				
9:30	10:00	<ul> <li>Arrival of Officials</li> <li>Hon. Minister of Agriculture</li> <li>Hon. Minister of Environment and Climate change</li> <li>Hon. Minister of Finance</li> <li>UN. Representative coordinator</li> <li>WB. Representative</li> <li>FAO. Representative</li> </ul>				
10:00	10:05	Opening				
10:00	10:05	Welcoming Statement - Lamin Fatajo - a.i. Director of NEMA Chosso				

10:05	10:15	Video presentation of NEMA achievements

		SPEECHES OF THE OFFICIALS
10:15	10:20	- UN Resident Coordinator
10:20	10:25	- IFAD Country Director
10:25	10:30	- Hon. Minister of Agriculture
10:30	10:35	- Hon. Minister of Environment and Climate change
10:35	10:40	- Hon. Minister of Finance
10:40	11:10	- Coffee Break

		PRESENTATION & TESTIMONIES
11:10	11:20	<ul> <li>NEMA Keys achievements :</li> <li>Ensa Colley : Monitoring and Evaluation Officer - NEMA</li> <li>Paul Mendy : Assistant M&amp;E Officer - NEMA</li> </ul>
11:20	11:25	- NACOFAG Representative Statement
11:25	12:00	<ul> <li>Beneficiaries Testimonies</li> <li>Matching Grant – Heritage</li> <li>Vegetable Garden – Fatou Secka</li> <li>Mangrove – Meta koita</li> <li>Rice production – Karafa Badjie</li> </ul>
12 :00	12 :15	Closing remarks - Hon. Minister of Agriculture
12 :15	14 :00	- Lunch Break





# National Agricultural Land and Water Management Development Project

**Project Completion Report** 

Annex: Nema Pcr Appendix 10

 Mission Dates:
 19/10/2020 5/11/2020

 Document Date:
 15/05/2021

 Project No.
 1100001643

 Report No.
 5635-GM

 DSF Grant ID
 2000001124

West and Central Africa Division Programme Management Department

# Appendix : Physical Achievements of NEMA Chosso Project as of End December 2019

Component 1 Output Rural Infrastructure development	Indicators	Unit	PDR Target	Revised Target	Achievement @ 31/12/2020	%
1.1. Effective watershed planning	Land managed under climate resilient practices	На	1530	1530	2,147.5	140 %
1.2. Runoff harvested and controlled in upland	Upland cropping area under control	На	1,840	3,000	4,630	154 %
1.3. Rice irrigated schemes developed	Tidal irrigation scheme	На	920	810	447.5	55 %
schemes developed	Lowland water control	На	12400	12400	12733	102 %
1.4. Vegetables garden schemes developed	Rehabilitation/ new scheme	На	250	300	165.0	55 %
1.5. FFS on improved Agricultural practices & CC	Farmers adopting Good Agricultural Practices	#	20,000	20000	15600	78%
0				- Device I former		
Component 2 Output Agricultural Commercialization	Indicators	Unit	PDR Target	Revised target	Achievement @ 31/12/2020	%
2.1. Improved rice and vegetables marketing	FO/WUG involved in group sale and using MIS	#	300	90 300	3726	124 %

<sup>&</sup>lt;sup>6</sup>Comprises 6 FOs, 4 WUGs, 350 vegetable groups linked to the MIS and 12 AVIP platforms

#### The Gambia National Agricultural Land and Water Management Development Project (NEMA Chosso) Project completion report Appendix 9: RIMS data

	Market constructed/Outlet set up	#	10	10	27	20 %
	Improved farm-to-market access roads	KM	0	50	67	134 %
2.2. Agricultural enterprises promoted	Enterprises/FOs supported for business development	#	432	250	172	40% %
2.3. Youth inclusion	Youth starting business	#	36	100	100	100 %
Component 3 Output Project Facilitation	Indicators	Unit	Target	Revised target	Achievement @ 31/12/2020	%
3.1.Capitalization of knowledge products and communication	Land and Water Management Strategy <sup>8</sup>	#	1	1	0	0
communication	Knowledge products	#	11	11	10	91 %
	Project visibility	Ls	1	1	1	100 %
3.2. Project M&E System strengthened	Data collection and management and assessments	Ls	1	1	0.75 <sup>9</sup>	75 %
3.3. Project targeting strategy developed	Targeting strategy/plan operational <sup>10</sup>	Ls	1	1	0	0

<sup>&</sup>lt;sup>7</sup>This number represents the market buildings constructed. It is important to note that 372 groups (FOs+groups linked to the MIS+4 WUGs+12 AVIPs) all represent outlets for access to the market actually created by the project.

<sup>&</sup>lt;sup>8</sup>This activity was discontinued at MTR. The explanation was that the MoA did not demonstrate the will to proceed with this. Further, a staff of the DoA was trained to Master degree level by the project on the expectation that upon his return to office, he would lead the development of the Strategy. This plan was thwarted as the student upon completion of study was posted as a Regional Agriculture Director thus rendering him unavailable.

<sup>&</sup>lt;sup>9</sup>The stand-alone M&E Information System cannot be populated with data as internet connectivity challenges have not been resolved. All relevant data are recorded on Excel sheets and available for review by the Mission.

<sup>&</sup>lt;sup>10</sup>It was explained at MTR that the proposed Targeting Strategy for the project could not be developed, because the PSU considered it sufficient that the project design has already specified the key target population for the project, namelywomen and youth. Women and youth are the principal producers of the project's target commodities –rice and vegetables, which further consolidates the targeting plan.

The Gambia National Agricultural Land and Water Management Development Project (NEMA Chosso) Project completion report Appendix 8: Physical progress table

3.3. Project sustainability	Exit strategy	#	1	1	1	100 %
plan and exit strategy developed						
developed						





# National Agricultural Land and Water Management Development Project

**Project Completion Report** 

Annex: Nema Pcr Annexes

 Mission Dates:
 19/10/2020 5/11/2020

 Document Date:
 15/05/2021

 Project No.
 1100001643

 Report No.
 5635-GM

 DSF Grant ID
 2000001124

West and Central Africa Division Programme Management Department

# **Additional Annexes**

- Lessons learnt
- Innovations
- KM
- Repurpossing of funds for COVID 19 Gender and Youth inclusion

### **ANNEX 1: Lessons Learned Chosso Design**

- 1. Smallholder farmers and communities have some experience in dealing with climate change and their local knowledge should be capitalized upon when introducing measures to strengthen their resilience.
- 2. Target beneficiaries should be properly sensitized and undergo specific climate change adaptation capacity building prior to involvement in participatory decision making and planning processes with a focus on climate change adaptation.
- 3. Championship of climate change through key institutions in planning and programming engenders its mainstreaming into policy and programming. The placement of the Focal Point of the Green Climate Fund in the Directorate of Budget at the MoFEA is facilitating the mainstreaming of climate change in policy and the programming of key sectors of the economy.
- 4. Access to timely early warning information by stakeholders, particularly farmers, enables them to take rational decisions including optimal choices of crop enterprises and varieties. In this regard, proper packaging is key to its understanding and utilization, particularly by communities with a high incidence of illiteracy.
- 5. Providing users of shared natural resources with alternative livelihoods eases pressure on the fragile environment as well as building their resilience to climate change. In this regard, a number of projects are promoting off-farm and non- agricultural income generating activities such as vegetable gardening, oyster culture and honey production.
- 6. Involvement of communities in participatory processes, including decision making on resource utilization and benefit sharing ensures their sustainable utilization and maintenance. In the case of Community Forestry Management, communities assume eventual ownership and retention of revenues from the resources, and this has ensured protection of the resources from logging and bushfires.
- 7. A watershed approach is the most optimal approach addressing the complexity of the many cause-and-effect relationships between upland and lowlands vis-á-vis the hydrological dynamics of the River Gambia.
- 8. Support to gender-sensitive community development plans coupled with participatory mapping enhances beneficiaries' real sense of ownership of development outcome processes.
- 9. Simple and low-cost irrigation technologies are more sustainable as operation and maintenance costs are affordable to beneficiaries.
- 10. Well-organized small-scale farmers are capable of managing irrigation schemes if they have access to improved seeds and credits as well as capacity building.
- 11. Establishment of Farmers' Field Schools is proving to be an effective means to test and validate innovations before farmers are convinced to adopt changes.
- 12. There are water resources that could be mobilized through appropriate and cost-effective irrigation technologies (tidal and solar pump) for year-round crop production.
- 13. Tidal irrigation has a profit-cost ratio of 2.02 compared to 0.72 for pump irrigation.
- 14. For every 1 m3 of water pumped from the Upper River of the River Gambia during the dry season, the salt front can move four km upstream.
- 15. Strengthening and using existing implementing institutional units is more cost effective and becomes a leveraging factor for donors with a view to avoiding duplications of efforts whilst maximizing the use of scarce resources.

### ANNEX 2: INNOVATION TABLES

Title	Description of the Innovation	Lessons Learned and Future Actions		
		Lessons Learned	Scaling up	
Farmer Field Schools for Climate Adaptation and Resilience:	An objective of the Farmer Field School was to educate farmers in integrated production and pest and disease management in the context of climate change using respective curriculums specifically developed for rice and horticulture production. An integrated approach was used to effectively train 640 farmers in improved management technologies and non-chemical inputs as key means of addressing production and pest management problems in rice and vegetable production. This has translated into an increase in yields and revenues for participants by 56% to 85.7% on average. To date, 50 Farmer Field Schools have been established in the six Agricultural Regions: 25 on vegetables and 25 on rice. This initiative has increased climate adaptation, resilience and agricultural productivity among women and youth farmers which in turn has contributed significantly to increased agricultural productivity and incomes.	Raising farmer awareness on climate change is a principal step for climate smart agriculture, prompting farmers' acceptance to participate in climate smart agriculture interventions.	Mainstreaming Farmer Field Schools as an Extension Strategy Strengthening the capacity of Plant Protection Services of the Ministry of Agriculture to ensure adoption of Good Agricultural Practices Adoption of appropriate technologies and improved and certified seed	
Improving Farm-to- Market Access Roads for Increased Value Chain Performance	The farm-to-market access roads initiative was launched to increase access to productive farmland and rural markets for smallholder farmers in The Gambia. The initiative is in line with the priorities of the International Fund for Agricultural Development (IFAD) and the Government of The Gambia to increase agricultural productivity and production as well as enhance revenue generation in rural areas. It involved the construction of new roads and the rehabilitation of existing roads to create inter-village and farm-to-market linkages in key NEMA-Chosso intervention areas. Some of these roads are enhanced with structures such as bridges and culverts to better facilitate access, especially during the rainy season. The roads are made largely of easily available materials, including gravel. Since the inception of this initiative in 2014, 36 kilometres of inter-village and farm-to market access roads have been constructed and/or rehabilitated in key intervention areas in the six Agricultural Regions of the country. In addition to this, 3,000 hectares of farmland have been opened up for rice production	Creating inter-village and farm to-market road linkages contributes directly to high productivity, low production costs, high competitiveness and good performance along the rice and horticulture value chains Investing in border communities promotes trade and value chain development across national borders The access roads have played a crucial role in increasing access to vital social facilities such as hospitals, clinics and schools	Continue capacity development Urgently put in place road maintenance and sustainability mechanisms before completion of the initiative Develop a strategy to promote national and local ownership of the investment	

Title	Description of the Innovation	Lessons Learned and Future Actions		
		Lessons Learned	Scaling up	
The NEMA-Chosso Capital Investment Stimulation Fund (CISF) for Increased Value Chain Performance	alone. The initiative has benefited more than 1,000 households, who now have increased access to more productive farmland and easier access to markets. The roads have opened up productive farmlands, thus increasing farmers' capacity to optimize these lands for increased rice and horticulture. In addition to this, access to agricultural markets has enabled beneficiaries to easily purchase farm inputs and sell their produce. One major impact of the initiative is increased profitable trade in rice and vegetables produced by smallholder farmers through the broadening and deepening of local and national markets in terms of volume, quality and value addition. Also, the initiative has contributed to reduced rural poverty across the country through enhanced performance of rice and horticulture value chains by providing year- round access to farmlands and markets. The Capital Investment Stimulation Fund (CISF), commonly known as the 'Matching Grant', was launched to promote investment and access to relevant and productive farm machinery, equipment and infrastructure (e.g. tractors, milling machines, boreholes and solar systems) for improved productivity and quality assurance along rice and horticulture value chains across the country. The fund targeted smallholder actors of the rice and vegetable value chains, especially women and youth. The mechanism initially involved the NEMA-Chosso project covering 45% of the total equipment cost, a 45% loan arrangement with a suitable lender and a 10% direct contribution by the beneficiary. During the NEMA- Chosso project mid-term review, the initiative, with flexible lending terms within the range of US\$10,000 and US\$90,000 payable between three to six years, was implemented in all six agricultural regions of The Gambia. Since 2016, the initiative has supported 25 value chain actors and agro-enterprises to procure relevant agricultural machinery and equipment such as tractors and	As key target beneficiaries of the project, targeting women and youth ensures increased and active participation in the CISF scheme Sensitizing CISF beneficiaries on the importance of savings for the purchase of spare parts and maintenance of their equipment is important for sustainability Continuous engagement of the private sector is required to encourage ownership and sustainability	CISF beneficiaries will receive follow-up support for the development of appropriate operational and maintenance plans New partnerships will be explored to promote youth participation in the scheme More attention will be placed on other actors along the value chain such as processors and transporters	

Title	Description of the Innovation	Lessons Learned and	d Future Actions
		Lessons Learned	Scaling up
	solar systems as well as dug boreholes for continuous access to water. In addition, the initiative funded the start-up of 117 youth- initiated businesses, surpassing the project's target of 100 youth start-up businesses. The main impact of the CISF has been enhanced performance and quality assurance of the targeted rice and horticulture value chains, and capitalization of small and medium enterprises across the country through improved and timely farm operations, increased quality yields and increased income and profits.		

# **ANNEX 3: Knowledge management and communication Development**

**Knowledge management and communication.** The activities of communication, knowledge mmanagement and capacity development are assets and are considered as satisfactory. They were each time planned and budgeted during the elaboration of the AWPB of the project.

In the NEMA project life cycle, the knowledge was the most important factor of production, next to labour, land and capital. It was about managing and sharing knowledge for the development of an organization. In the development world, knowledge management (KM) has become more essential for the sustainable development of projects. The introduction of KM & Communication has improved farmers effectiveness in production and productivity, group management, market Information sharing and production planning. It leads to higher efficiency in terms of less duplication of work, followed by notably better performance, enhanced staffs' capabilities and better-quality decisions throughout the implementation of NEMA Project.

2. Effectiveness of Knowledge Management - Key Achievements

A KM and Communication Strategy was developed and has been used as a reference document for the implementation of NEMA throughout the seven years period. In addition to the KM & Communication Strategy, a Rice Development Strategy was also developed and used as a reference document throughout NEMA implementation.

Five hundred copies of News Letters were produced, printed and distributed to Farmers, National Assembly, Implementing partners and Development partners like IFAD. The project has also produced and printed another five hundred brochures and some Outcome Harvesting documents and distributed them to partners and donors.

In 2019, the project team went with some of the Farmer Organization and Agricultural Value Chain Interaction Platform to Northern Senegal for them to go and learn from their Senegalese counterparts how they are operating. The exchange visit was useful because they have realised that there is an Agricultural Bank for farmers in Senegal and Gambia don't have.

In 2017, the project participated in a learning route organized by PROCASUR and the workshop brought together participants from Sister Projects like PAFA, PADAER, from Senegal. During the learning Route the project-shared experiences with them about Farmer Cooperatives or Organizations role and importance in the Value Chain Development. This experience has increased our Farmers capacity to manage and provide seeds and inputs to their members.

The project organized a visibility event where Farmers were brought together from various parts of the country to share their experiences with their colleagues. The programme was aired over Gambia Radio and Television Services and the Newspapers.

The strategy developed by the project explains how KM will be implemented over the last seven years.). The monitoring strategy of KM activities was to regularly do some spot-checking to see whether the activity is being implemented or not; training or activity reports. The gaps are were identified using the experience sheet where a self-assessment of staffs done.

# Effectiveness and Key achievements of Communication activities

For the project period of seven years, the project provided the annual training to the farmers on thematic **issues** like the importance of agricultural value chain development, environment, food security, group management and gender and youth participation in the sector.

The types of communication products the project developed were, Sign Boards for all our intervention **sites** in the country, flyers, Pull- up Banners, still photos and Videos.

The Project has a WhatsApp page and a Website and the project post stories to FIDAfrique Facebook page regularly.

The project communication strategy was to generate and share information with stakeholders and **donors** about the successes as well as the challenges. The main targeted audience of the communication products are government, National Assembly members, farmers, partners in development and donors.

The performance indicators of the communication activities were the feedback from the recipients of the message. The first thing was that whether they had the message, decoded and understood **the** information. The second step whether it had changed their behaviour positively. For example, if the message was about staggering production in vegetable gardens, the indicator would therefore be whether they are practicing it or not.

The Communication plan was to effectively communicate with farmers and stakeholders about the project's goal, objectives and strategies. We also planned to communicate to donors and government our annual work plan and budget for each and our progress to them annually. Several communication products have been successfully realised by the project namely: Sign Boards, pictures, videos brochures and flyers shared with farmers and stakeholders.

A market Information System was also developed and given to vegetable growers in our vegetable gardens. The facility enables farmers to share information about the price of a particular community at a particular market on a particular day.

Mostly, the project interacts with other IFAD project teams through WhatsApp and Facebook group Fidafrique where they exchanged knowledge and best practices.

The project beneficiaries won the IFAD gender award 2019 organised in Rome. It was a great achievement **in** terms of communication.

## Effectiveness and Key achievement of Capacity Development activities

The Capacity Development strategy of the project was to assess all the groups that the project want to empower to establish their strengths, weaknesses and opportunities to know which capacities they lack and needs training on. When we know their training needs, we then identify a capacity development firm that has a comparative advantage over the rest to train them on behalf of the project.

The project has conducted capacity-building operations depending on how many requests we received in the year from communities of farmers, farmer's organizations and the project staff. On the average 10 capacity Development activities per year.

The following Committees were formed and trained over the years: -

- Farmer Organizations Executives
- Water Users Groups
- Agricultural Value Chain Interactive Platforms for Rive and Vegetables,
- Youth Enterprises
- Woodlot and Mangrove Management Committees etc
- Functional Literacy Classes
- Garden Management Committees
- Village Farmer Associations

All these committees are now so empowered that they can manage themselves for sustainable natural resource management and food security. Overall, the total number of people that benefitted from Capacity Development activities of the project is sixteen thousand, (16,000). 76% are adult and young women groups and 23% adults and young Men and 1% of project Staff (both men and women).

Capacity Development gaps were identified at beginning of the year. Before any capacity development of groups starts, they are assessed to know what capacities they have and which capacities they don't have. Skills gaps were identified by asking some project staff about which area they would like to be trained to enhance their skills for better project implementation.

#### Table 1: Results Tables of KM, COM and CAPACITY BUILDING

Activities	Targets	Achievements
Case studies	7	7
Knowledge products	15	11
Policy brief	1	1
Visibility events	10	10
Brochures	500 copies	500 copies
Newsletters	500 copies	500 copies
Reports KM	1 KM strategy	1 Km Strategy
Documentaries	10	10
Videos	10	10
Exchanges Visits	5	5
Peer learning	Same as Exchange Visits	
Radio and TV show	6	6
Community of practice	1	1
Social Media Contents	2	2
Official visits (EU ambassadors or	4 Ambassadors 1, Lisandro Martin 1,	4
Visits of NAM	NAMs 2	
Best practices guides or brochures	13	13
Capitalisation documents	Same as above	

# ANNEX 4 Repurposing of NEMA funds for COVID 19 SUPPORT 17DEC

### Relevance about the context of global pandemic and RPSF

At the early stage of the outbreak of the global pandemic of COVID 19 with its effects on the Gambian agricultural sector, IFAD has endorsed the request from the Ministry of Agriculture to support affected household farmers with the remaining budget of the NEMA project.

The methods employed by the Government for the containment of the COVID-19 pandemic have adversely affected the livelihood of the farmers of the region, which led NEMA project to intervene in all the interventions areas and support farmers with different types of sanitary materials and inputs. (fertilizer, rice seeds, vegetable seeds). NEMA project provided these materials and inputs to prevent the virus from spreading within the farming communities and helped them to recover the losses that they experience during this period, especially at marketing level. The sanitary materials were distributed only to NEMA intervention areas (gardens), whiles the vegetables seeds, fertilizer, and rice seeds were distributed to both NEMA and none NEMA intervention sites, but priorities were given to NEMA intervention sites. The detail of the distributed materials are following:

- 10 000 Face masks
- 20 000 bags of fertilizer (10,000 NPK and 10,000 Urea)
- 100 tons of certified seeds
- 4 000ha Ploughed the project intervention sites

IFAD through the NEMA project have been supporting farmers within the region for the past five years in order to increase their production and productivity and boost their income. During the PCR field visits farmers' express happiness for the support because COVID-19 has brought fear across the world particularly developing countries like the Gambia.

## Effectiveness of the activities in the project intervention areas

**The tables below:** show the breakdown of how the sanitary materials and vegetables seeds were distributed within the various communities.

Covid-19 Action	Stock	# beneficiaries		33%		Re	gional	distribut	Regional distribution					
Covid-19 Action	SLOCK	# Deficiciaries	Women	Youth	WCR	LRR	NBR	CRRS	CRRN	URR				
Face Masks &														
sanitizing	10													
materials	000				7	4	9	3	1	9				
Vegetable seeds														
(Kg)	690	6 600	6 270	2 178	1400	800	1800	600	200	1800				
Rice seeds (MT)	142	2 774			350	350	350	727	512	485				
Fertilizer (MT)	31,5	4 037			404	1076	1346	1346	807	404				
Ploughing (Ha)	4000	8 000	<u>5 600</u>	2 640	100	700	1550	1300	250	100				
		<u>14 600</u>	<u>11 870</u>	<u>4 818</u>										

#### A) Rice Seeds

NO	DIOTDIOT			1717)/	
NO.	DISTRICT	SEED TYPE	QUAN		BALANCE
			RECEIVED	ISSUED	0
1	UPPER FULLADOU	Wab-105	30	30	0
	WEST	Farro 44	40	40	0
2	LOWER FULLADOU	Wab-105	270	270	0
	WEST	Farro 44	54	54	0
3	NIAMINA EAST	Wab-105	110	110	0
		Farro 44	186	186	0
TOTAL=		Wab-105	410	410	0
		Farrow 44	280	280	0

A) Fertilizers

NO.	DISTRICT	FERTILIZER TYPE &QUANTITY ISSUED (50Kg/Bag)							
		NPK:15:15:15:4	UREA	NPK:6:20:10					
1	UPPER FULLADOU WEST	222	148	460					
2	LOWER FULLADOU WEST	1008	672	342					
3	NIAMINA WEST	0	0	115					
4	NIAMINA EAST	855	570	286					
5	NIAMINA DANKUNKU	0	0	172					
TOTAL=		2085	1390	1375					

## B) Balance Being Distributed at the Time of Reporting

N0.	FERTILIZER TYPE	QUANTITY RECEIVED (50Kg Bags)	QUANTITY ISSUED (50Kg Bags)	BALANCE (50Kg Bags)
1	NPK:15:15:15:4	2500	2085	415
2	UREA	2500	1390	1110
3	NPK:6:20:10	1375	1375	0

#### TABLE 1: SHOWING TYPE OF SANITARY MATERIALS & QUANTITY RECEIVED AND ISSUED

N O	DATE	NAME OF BENEFICIAR	DISTRICT	VILLAGE			RIAL & QUAN AND ISSUED	
		Y			FACE MASK	BLEAC H	HAND WASH LIQUID	BUCKE T
1	19-6-2020	Omar F. Sanneh	Niamina East	Sinchu Gundo	10 pieces	0	0	0
2	23-6-2020	Mambali Dem	Niamina East	Nanaba Cluster Women Vegetable garden	550 pieces	9 Bottles (500ml)	6 bottles	3 big ones
3	23-6-2020	Mama Ceesay	Lower Fulladou West	Dasilami Women Garden	550 pieces	9 Bottles (500ml)	6 bottles	3 big ones
4	23-6-2020	Sarjo Ceesay	Lower Fulladou West	Saruja Youth Garden	550 pieces	9 Bottles (500ml)	6 bottles	3 big ones
то	TAL=4		2	3	1660 pieces	27 Bottles	18 bottles	9 big ones

## TABLE- 2: SHOWING BENEFICIARY DETAILS OF RICE SEED AND QUANTITY ISSUED

NO	DISTRICT	VILLAGE		FICIARI	TOT	VARIET	QUANTITY	QUANTIT	PLANNED
-			ES		AL	Y	RECEIVED	Y	HECTERA
			MAL	FEMA			(BAGS)	ISSUE	GE
			Е	LE				(BAGS)	(Ha)
1		Kundang	0	307	307	WAB 105	50	50	115
						FARO 44	65	65	
2	Niamina East	Sinchu	26	97	123	WAB 105	20	20	47
		Gundo				FARO 44	27	27	
3		Sotokoi	1	286	287	WAB 105	30	30	102
						FARO 44	72	72	

	SUB	29	178	277	455		270	324	324
29		Saruja	4	7	11	WAB 105	11	11	11
20		ng	4	14	10		10	10	10
28		Nfally Brikamandi	4	14	18	WAB 105	18	18	18
27		Madina	4	1	5	WAB 105	5	5	5
26		Jahally	5	0	5	WAB 105	5	5	5
25		Brikamaba	7	11	18	WAB 105	18	18	18
24		Dasilami	7	11	18	WAB 105	18	18	18
23		Taifa	4	1	5	WAB 105	5	5	5
		Fulabantan g	5				5		
21 22		Faraba	3	2	5 5	WAB 105 WAB 105	5	5	5
20		Sare Nfally	2	3		WAB 105	5		
19			4	3	5	WAB 105	5	5	5
		Tako Sare Balla		1	5			5	5
18		Ceesay Sare Yerro	3	2	5	WAB 105	5	5	5
17		Mandina	5	0	5	WAB 105	5	5	5
16		Pacharr	5	10	15	WAB 105	15	15	15
15		Sinchu Dembelly	4	1	5	WAB 105	5	5	5
14		Sare Ngai	2	3	5	WAB 105	5	5	5
13		Sare Futta	5	0	5	WAB 105	5	5	5
-				-		FARO 44	15	15	
10	1	Welingara	31	9	40	WAB 105	5	5	20
-			-			FARO 44	0	0	
)	1	Fass Abdou	4	11	15	WAB 105	15	15	15
-		rasanang	J			FARO 44	0	0	
3	4	Tabanding	0	15	15	WAB 105	15	15	15
•		- NJODEN	1		20	FARO 44	0	0	20
7	4	Njoben	7	13	20	WAB 105	20	20	20
0		Dollani	12	44	50	FARO 44	0	0	
6	4	Boiram	12	44	56	WAB 105	27	27	27
5			U	10	10	FARO 44	0	0	
5	4	Sare Butti	0	10	10	WAB 105	10	10	10
4		Boye Fulbeh	14	0	14	WAB 105 FARO 44	14 0	14 0	14
4	**===	Devia	4 4	0		FARO 44	0	0	
3	Lower Fuladou West	Ahlulai	7	18	25	WAB 105	14	14	14
	Lauran Euladau	Fula				FARO 44	20	20	
2		Kerewan	20	35	55	WAB 105	10	10	30
	-	Mandinka				FARO 44	15	15	
1		Kerewan	6	49	50	WAB 105	15	15	30
=						105- Farrow 44-	186		
Sub	Total	4	45	495	540	WAB	110	296	296
		Misera				FARO 44	22	22	

						EARO			
1	Upper Fulladou	Dobang	6	144	150	<b>FARO-</b> WAB 105	30	30	50
	West	Kunda				FARO 44	20	20	
2		Bansang	17	13	30	WAB 105	0	0	10
		Bantanto				FARO 44	10	10	
3		Bansang	9	11	20	WAB 105	0	0	10
		North				FARO 44	10	10	
SUB =	TOTAL	3	32	168	200	WAB-	30 40	70	70
						FAR0-			
GRA	ND TOTAL=3		174	1138	1312	WAB 105	410	410	690 Ha
						FARO 44	280	280	

# DISTRIBUTION OF VEGETABLES SEEDS TO FARMERS FOR COVID-19 PANDEMIC SUPPORT

NO	SCHEME					СОММС	DITIES				
		Tomato	Cabbage	Okra	Onion	B/tomato	Egg plant	Lettuce	Butter nut squash	S/pepper	Hot pepper
1	Darsilameh Youth Garden	3	3	3	5	3	3	1	3	3	5
2	Marakissa Women Garden	3	3	3	5	3	3	1	3	3	5
3	Bullock Youth Garden	4	3	3	5	2	3	1	1	3	5
4	Berefet Women Garden	4	3	3	5	3	3	1	1	3	5
5	Bintang Women Garden	4	3	3	5	3	3	1	1	3	5
6	Sibanor Women Garden	4	3	3	5	3	3	1	1	3	5
7	Batabutu Women Garden	4	3	3	5	3	3	1	1	3	5
8	Nyoffelleh Women Garden	3	2	3	5		3	1			5
9	Banjulinding Women Garden	4	3	3	5		3	1			5
10	Sukuta Women Garden	3	2	3	5		4				5

The Gambia National Agricultural Land and Water Management Development Project (NEMA Chosso) Project completion report Appendix 13:Final wrap-up meeting minutes

11	Busumballa Women Garden	3	2	2	5		3				5
12	Kalagi Women Garden	3	2	3	5		3				5
13	Kan Wally Women Garden	3	2	2	5		3				5
14	Basorri Women Garden	3	2	3	5		3				5
	TOTAL	48	36	40	70	21	43	9	11	21	70

	2020 COVID 19 PLOUGHING SUPPORT		
No	SITE/VILLAGE	REGION	НА
1.	Salikenni	NBR	375
2.	Bakang	NBR	100
3.	Salikenni Cluster	NBR	100
4.	Sara Kunda	NBR	100
5.	Jurunku	NBR	100
6.	Jurunku Cluster	NBR	100
7.	Gunjur	NBR	300
	Kinteh Kunda	NBR	300
8.	Sika	NBR	75
9.	Toniataba	LRR	100
10.	Pakalinding Cluster	LRR	100
11.	Burong	LRR	100
12.	Jasong	LRR	100
13.	Sankiwya	LRR	100
14.	Massembeh	LRR	100
15.	Kanni Kunda	LRR	100
16.	Sotokoi	CRRS	200
17.	Kudang	CRRS	200
18.	Sinchu Gundo/Welligara/Boiram	CRRS	100
19.	Dobang Kunda	CRRS	100
20.	Jahally & Pacharr	CRRS	395
21.	Pacharr	CRRS	105
22.	Kudang Cluster	CRRS	100
23.	Boiram Cluster	CRRS	100
24.	Barajally Cluster	CRRN	100
25.	Bakadaji Jaylan	CRRN	150
26.	Ndemban, Sibanor, Bita, Kassange, Giboroh Kuta, Lamin	WCR	100
20.	Changally Lang Kaddy, Sutukoba, Limbambullu Bambo	URR	100
TOTAL			4000Ha

# Annex 5: GENDER AND YOUTH INCLUSION

# SPECIFIC PROJECT INVESTMENTS (VEGETABLE AND RICE VALUE CHAINS) TO WOMEN EMPLOYMENT CREATION FOR YOUTHS AND WOMEN

All the investments on land infrastructure development (dikes & spillways and bridges & culverts) for rice production and productivity; Tidal irrigation development for rice production as well as run-off water control infrastructure and the vegetable gardens have largely benefited women and youths and their commutative effect is contributing to employment creation along the value chain. At the production side, the youths as part of the local economy have been recruited by the various service providers (contractors in both rice and vegetable investments) as unskilled labourers and this has contributed to the non-farm income sources for their gainful employment while living in their localities

For the women folks, the project investments to improve the production support systems (infrastructure for the tidal schemes in fresh water ecologies and solar-powered boreholes and water reticulation systems in the gardens and the various capacity building that accompanied them) enabled the practice of double cropping which reduced seasonal unemployment. During the PCR mission, women farmers expressed that they now produce at least twice a year in much improved production environments as compared to before. For rice ,the total lowland and tidal schemes developed was to 13,160ha and benefiting 26,329 households, of this, a total of 2,473 ha (CRRN & CRRS with fresh water bodies) cultivable by 5,809 households is being used for wet season production while for the vegetable gardens schemes, out of the total 165 ha developed and cultivable by 6,600 households for year round production, at least 0,25% is being cultivated in the wet season and benefiting 2315 households as compared to before the project.

The project investments in the rice field of CRRN&S with year-round fresh water capabilities and the wellimproved 33 vegetable gardens across the country opened up avenues for both women and youth to create more gainful employment. The project provided 6 tractors to the 6 farmer cooperatives and financed 13 tractors under the matching grants scheme which are all operational and employed in the land preparation for crop production but also for other non-farm economy activities. These tractors are being operated by 57 youths and is a direct source for employment in both the wet and dry season.

As a result of the COVID 19 pandemic, most rice farmers had to temporarily abandon their farms. The project palliative support in the form of inputs (certified rice seeds, 142tons, vegetable seed, lump assortments, fertilizers 31,500tons and lowland preparation totalling 4000 had created income generating opportunities for the 13 recipients of the matching grant (Tractors) through their active ploughing of the women rice fields but also provided jobs for the youth to earn income during those dire moments. It is also contributing to household food security as most farmers reported bumper harvest that has not been witnessed in four years. The surplus paddy beyond household consumption need therefore represent an economic commodity that can earn income.

In the horticulture subsector, women are benefiting from its live changing opportunities. The orientation of the farmers (at least 6,600 women) in all the 33 gardens towards commercially- inclined production planning based on market demand is driving to gainful employment. Women farmers are now growing high value crops that attract international market demand such as chill pepper and okra as opposed to the traditional crops that were mainly for subsistence. For example, as a result of the project matching grant scheme, an off-taker call Heritage was engaged in contract farming in Darsilami where women farmers were able to directly sell up to 5,320 kg of chill pepper a feat never before in their life as vegetable growers.

Women farmers are now recoding their produce and other farm management data/information and using marketing information systems to determine price and negotiate with traders although this need improvement. In only one production cycle, Marikissa women were able to sell to the market D681, 751.5 equivalent to USD136, 350.5. Some Farmers have moved to the marketing aspect of the value chain as in the case of "Young Fatima Seckan" (an IFAD gender award winner 2017?) who was able to develop marketing and brokering skills as a result of the capacity building activities of the project particularly market information systems which she utilised to sell the product of her farm members to other middlemen in the

major towns thus relieving them of the marketing bottlenecks? As a result of the project support in the garden, Fatima was able to raise income and complete her secondary education, acquire a diploma in computing and is still pursuing further studies. She now serves as role model for the youths.

The project strategic partnership with technical line department (HTS, PPS) and other CSOs (Concern Universal, NAWFA) had a combined positive effect on farmer's productivity and income. The Bereft farmer field school to promote integrated production and pest management represented a model. After just 1 season of participation in the FFS, onion production in the garden increased from 5.2 tons to 8.5 tons from 2016 and 2017, with corresponding revenues increasing from D6, 800 to D11, 200 during the period. Similarly, cabbage production almost doubled from 0.7 to 1.3 tons, with associated revenues increasing from D10, 500 to D19, 500.Tomato production increased from 0.8 tons to 1.25 tons, with corresponding revenues from tomato sales increasing from D5, 000 to D7, 800.

The project capacitated youths under the GYIN MoUs are engaged country-wide in producing cassava on contract farming arrangement for ASPUNA (cassava milling plant) that also received a matching grant. As a result of the grant financing, ASPUNA has 36 young employees nearly 70% being women

The capital assets supported by the project for the 6-farmer cooperative has generated a lot of employment for the youths in tractor ploughing services and other off –farm activities, milling machines cereals processing and with the post-harvest combined harvesters. Overall, a total of GMD 12million equivalent to USD 232558.14 have been generated within 2 years of their operation. With this financial health of the cooperative, plans as afoot to transform it into a farmer- based credit union

The project strengthened horticultural producer groups and enhanced the value-chain. A total of 393 (98% women) farmers from the 33 gardens; had their capacities strengthened in seedbed preparation, compost making and application; transplanting, pest management, weighing of produce and generating market information; produce in separation for consumption and for income generation, group management, recording keeping.

In terms of market price information system, vegetable producer's capacities were built as it relates to income generation. Out of the target of 50,000 farmers getting the market information required, 45,000 farmers (representing 95%) 98 % of whom are women have benefited from the market information. For the first time, farmers are now practicing the collection of market prices on a weekly basis covering 9 major horticultural products (Tomato, Onion, Cabbage, Hot pepper, big pepper, Okra, Sweet pepper, Eggplant and Bitter tomato).

The Market Price Information System capacity buildings initiatives of the NEMA is contributing immensely to improving agricultural production, productivity and improved income for vegetable farmers. A Case story of Fadernding Fadera "Initially, we used to sell to the middlemen or vendors at giveaway prices due to the fact that we lacked access to market information. Thanks to UP, we are now able to seek for market information through a mobile device that helps us to know current market prices of common vegetables we grow, e.g. Tomato, Onions, Pepper, Eggplant, and Cabbage, and be able to weigh the numbers of kilos before we get to the market".

In Darsilameh in C.R.R. *Fanta Ceesay* said ", we grew cabbage, eggplant and pepper. However, through a critical market study, we were able to stagger our production and produce for the market at a time when demand for these crops were high. As such, we scored twice of whatever amount of money we used to get before. Imagine "NJendanjies" (middlemen) used to buy a bag of onions for just D400 or D500. This season, I cultivated 3 beds of eggplant. When I sold my first harvest (3 pans), I was able to score D700. For 3 months now I am harvesting as you can see the eggplants yourself. As a result, my livelihood and health has improved greatly, I bought a goat that I'm rearing, and being able to take care of my family' needs. Before joining this garden supported by NEMA,I used to buy "Bonga-fish" and resell it, walking from Darsilameh to Kerewan daily for selling. Since I joined the garden, I am now able to buy a bag of rice and provide regular fish money". We appreciate the new production techniques that have been introduced, which are really effective.

The NaWFA functional literacy programme was effective in promoting overall functional literacy and equipping beneficiaries with necessary materials for various aspect of literacy and numeracy to enhance their production and productivities in the rice and vegetable value chains. The programme benefitted over 1800 rural smallholder farmers, more than 90% of them were women. The story of beneficiary, **Haddy Buoy** from Ndioben Fulladu in CRRS showcases how functional literacy is changing the lives of beneficiaries. She joined the first batch of trainees in 2013 and graduated in 2015. Now employed as a facilitator, she's providing functional literacy support to her community and earning income to support her family. **Haddy's** life has been transformed from being fully illiterate to the level of functional literacy with gainful employment. Importantly, she is also putting her skills to use by promoting climate adaptation and resilience through her new-found role of functional literacy facilitator

# 3. EXTENT OF YOUTH ACCESS TO AGRICULTURAL ENTREPRENEURSHIP FINANCING

From the perspective of relevance, the project had made use of youth- friendly and youth- led organisations such GYIN and NYC to streamline access to the project matching and start-up grants for agriculture entrepreneurship financing to promote processing and marketing for both rice and vegetables. A partnership MoU between GYIN and the project was signed and numerous capacity building activities such as ((i) counselling, mentorship and advocacy (ii) group formation, governance, leadership (iii) business management and functional literacy (iv) book-keeping and business management skills and participation on national and international trade fairs and workshops) to enhance entrepreneurship for rice and vegetables had been conducted and laid the foundation for better access and utilisation of the entrepreneurship financing window

In terms of effectiveness, the project fully achieved the revised Mid-term Review target of 30 to 100 youths with the use of various entry points /fora such (i) Creating Opportunities for Rural Youths (CORY), (ii) Entrepreneurship, Leadership, and Information Technology and (iii) Rural Youth Award Ceremonies to reach out to 170 youths who were fully prepared to be capitalized out of which 100 benefited (76 male and 24 Female) from a startup to operate various business enterprises and created 162 direct jobs corresponding to 54% of the appraisal target of (300 jobs). A total of D30, 000,000 equivalent to USD 581,395.3 was disbursed. The efficiency of the of the access to agricultural entrepreneurship financing in terms of timing of investments was moderate given that most of the youths accessed the financing after the midterm review in 2016 which was three years after project effectiveness

Despite the rather late start of the startup financing, the project had registered great success as most of the youths that received support are still in business and also creating jobs. One of the success stories from the entrepreneurship financing is Almamo Dibba a youth from Jarra Soma "*I was very lucky to be trained by NEMA through GYIN-Gambia in Entrepreneurship and Business Management. Even before that, I had attended similar trainings before, but that of GYIN-Gambia, supported by NEMA was very effective. Immediately after that training and being supported with a start-up capital, I was able to properly establish my business by buying more locally produced foods crops and adding to my shop. In fact, it was in the same 2016 that I registered my business. Before I was operating without registration, but after attending that training, I came to understand the importance of business registration. Thanks to God, from 2016 to date, I have created employment opportunities for my fellow youth. As you can see, there are staff over there working...we have up to 5 staff working in the shop here full time".* 

Justifying the importance of recording as one of the training modules delivered by GYIN, Alimamo Dibba said that *"if not for record keeping it will be difficult for me to properly manage my business. If not, I would have had problem with Gambia Revenue Authority (GRA) over tax payment this year. I came to understand that you only pay 2.5% as tax, if your quarterly sale is up to D500, 000.00, which was contrary to how they used to charge us. Preciously, they will just come to the shop and charged us based on the physical appearance or capacity of the shop, which seems very unfair. Hence my quarterly sale is more than D500, 000.00, I only pay 2.5% which is much favorable to me. Without keeping proper records of the business, I would not have known my quarterly sale".* 

# ASSESSMENT OF THE AVIP AND MARCHING GRANT

The AVIP implementation began in 2017 with the signing of a contract between the WARF in partnership with GYIN, the Department Agriculture Services (DOA) and the project as a pilot. The initial target was for

6 AVIPs but this was extended to 12 AVIPs in 2018. The project successfully established all the 12 (9 horticulture and 3 rice) based on the plan representing 100% achievement rates

The establishment of the AVIPs were based on a participatory process facilitated by DOA, WARF and NEMA staff. The project beneficiaries themselves selected the membership based on a gender and youths sensitive criteria (4 members from the Village Farmer Associations/NEMA Kafos(at least 50% female), 6 producers/farmers (at least 50% female),2 youth representatives (youth should be actively engaged in the Agricultural value chain, at least 50% female),2 transporters, 2 middlemen (Middlemen based at community level and at the market level), 2 transformers (i.e. millers for rice or processors for vegetables). On the basis of this criteria, 12 AVIPs platforms, 3 for rice and 9 for vegetable were established across the country. The platforms have a total of 216 value chain actors of which 75% (162 actors) are women and 10% (21 actors) are youths from the project intervention areas and members of the GYIN. Thus, the formation of the AIVPs was anchored on a strong institutional formwork at the community level with the existing kafos under the Village Development Committees (VDCs) and the established Global Youth Innovative Networks (GYIN) which are both gender and youths inclusive

The AVIPs benefited from various forms of capacity building support and technical backstopping including coaching and mentoring, as a consequence, the membership of each platform have taken full responsibility and authority for their operations and is a model for sustainable agricultural value chain development in The Gambia.

The contribution of the AVIPs to the project in terms of enhancing commercialisation of the producers was not fully achieved due to the inability to achieve the objective of creating 18 new rural agri-businesses over 2 years, providing full-time employment for 90 to 100 rural youths and women members of selected rice and horticulture value chain interaction platforms (production, transformation and marketing), objective of providing value chain financing to promote access to agricultural capital and resources for 15 agro-enterprise members of the interaction. As part of its rolling strategy to expand and consolidate this gain of the AVIPs in the ROOTs project, NEMA has (i) identified major operational constraints and market access challenges (ii) developed a strategy for market linkages and (iii) identified key potential economic operators.

The matching scheme under the subcomponent 2.2 of the Agricultural Commercialization component was and is still relevant from the perspective of optimizing the intervention outcomes from the rice and vegetable particularly in enhancing the upstream segment of the value chain. It was and is relevant given the challenges faced by farmers in accessing productive assets for increased rice and vegetable production within rural communities and the increasing need to engage the youths that constitute 65% of the population amidst the rising unemployment rates of 12.9% based on the ILO estimates of 2020.

With regards effectiveness, the matching grant /CISF financed 40 applicants in a wide range of investments along the two value chains (rice and Horticulture) and were premised on promoting commercialization. The most prominent subprojects financed were (i) 9 irrigation equipment for primary production (ii) 13 tractors (iii) 15 food processing equipment and) iv) 3 cold storage including transportation vehicles. A total of 29 were individual enterprises of which only 5 (26%) were women and 11 (28%) were groups mainly youths of mixed sexes. In terms of access to the grant financing scheme, gender and youth inclusion was Not Satisfactory. The major constraint faced by women and youths to access the matching grant scheme was the financing model of 45:45:10 and the embedded conditionality for bank financing of 45%. While this was reviewed after the midterm review to 60:40 and the project adopted two –prong innovative strategy of (i) supporting the youths to prepare bankable/winning business plans through a consultancy mentorship service and (ii) linking successful youth applicants directly with equipment suppliers based on a signed mutual understanding and consent agreement, this did not significantly changed the beneficiary composition in terms of gender and youth inclusiveness.

In term of the quality, an analysis of the 40 financed investments show they contributed to improving the status of women and youths both in terms of employment generation and also reducing drudgery through labor saving on women. With regards youth's employability, the 13 tractors, 15 food processing/milling machines and cold storage transportation systems are all operated by youths and the services of tractor ploughing mainly in the rice fields not only relieves the women from the use of long hoe but facilitated the

access to other fallow fields. Food processing is a major chore of the women folks and the availability of processing equipment represents a huge burden relief. As result of this assets in the project areas, it can be deduced that the matching grants scheme is positive in its effect on women and youths overall.

# Effectiveness of the Project Strategy and Partnerships for Mobilizing Women and Youths to Participate Profitably in The Project

The demand -driven nature of subproject financing as per the project appraisal document was adhered to and provided opportunities for dynamism in the strategy and partnership approaches for women and youths to participate in implementation and benefit from the project investments. It was narrated during the PCR field interactions with beneficiaries that participation was satisfactory as the entry point was the decentralised structures such as Village Development Communities, District Authority Centres and Local government Authorities in all the project regions This approach was effective as it is in consonant with participatory decentralised governance and planning provisions contained in the Local Government Act 2002 where the representation and participation of women and youth are clearly defined and constitutes the basis for the recognition proper accountability and inclusiveness. Furthermore, the project had set-up and strengthened various women and youth structures and organisations such as Water Management Committees, Market Management Committees, and Village Farmer Associations that were largely headed by women or youths and they participated in all key decision-making processes related to the investments.

In the rice value chain, one of the innovations of the project that enhanced partnership for mobilising women and youth to participate fully was the setting up the 6 Farmers Cooperatives composing of 24 villages and the 12 Agriculture Value Chain Interactive Platforms (AVIPs) of which 3 were for rice. These organisations have been capacitated and led the interactions between the project actors as well as within themselves. Women and youths participated in the setting up these organisations and took leadership position thus contributing to breaking the social norms in local development were older men used to dominate. By setting up these women and youth dominated organisations and building their capacities in both institutional and organisational knowledge and skills to solve sociotechnical issues, the NEMA is contributing to social and human capital enhancement at the community level.

For the vegetable value chain, the project has successfully reconstituted and strengthened (leadership, record keeping, cooperative concepts and principles meant to improve their performance) the existing Marketing Federations established in all regions and setting up of a National Apex Cooperative call 'National Association of Vegetable Growers' Cooperative, The Gambia; a thirteen (13)-member executive from the marketing federations elected to serve as the APEX body. This APEX body had been instrumental in helping to advocate for and coordinate the activities of the Marketing Federations. The Federations were conducting regular meetings, during which the executives of the marketing federations provide updates on the federations' activities and progress made in the implementation of their plans and strategies fostering linkages between the marketing federations, vendors, traders and wholesalers within their respective regions

The project strategy and partnerships with other stakeholders in the form of MoU (Government Technical Departments, private sector or other CSO) to ensure that women and youth have access to information for coordination and partnership was effective as they fostered the building of capacities and technical support to implement and use the rice and horticulture investments. The following technical line departments partnered with NEMA to mobilise women and youth participation (i) the Department of Community development - trained 576 group executive members from 32 producer groups, 54% of whom are women in group formation and organizational management, leadership and management, record keeping, participatory planning, resource mobilization and financial and social accountability, as well as strategies for mainstreaming gender and youth issues in group operations.-

Thirty-two (32) farmer organizations; called Village Farmer Associations (VFAs) have acquired legal status following official registration with the relevant authorities, and have developed clearly defined by–laws, governance procedures and strategic plans. The VFAs also received technical support on Watershed Planning and Management covering 576 beneficiaries of which 53.9% were women

(ii) Department of agriculture and plant protection services and NaWFA on Farmer Field Schools (FFS) -A total of 50 farmer field schools were established in the 6 Agricultural Regions across the country yearly, 25 on vegetables and 25 on rice, with 640 farmers actively involved in the rice and vegetable FFS sessions. Female farmers dominated the FFS in terms of membership and participation, making up 81% and 84% of the participants for the rice and vegetable FFS, respectively

Horticulture Technical Services and PAT-ENT (a private commercial partner involved in the promotion of organic matter for production and sale) invested in promoting access to reliable and sustainable fertilizers through the establishment of compost chambers (each with a capacity of producing 50 tons of organic fertilizer) and the training of vegetable farmers. As a result of the partnership, a total of 135 farmers (50 males and 85 females) successfully trained on Compost Chamber manure production techniques in all the nine (9) community garden schemes equipped with compost chamber facilities.

(iii) Partnership with National Youth Council and Global Youth Innovative Network (GYIN)

Numerous capacity building initiatives on entrepreneurship were supported by NEMA through Global Youth Innovation Network Gambia (GYIN) and Grassroots Business Initiatives (GBI) and National Youth Council (NYC) to access the matching grant to promote processing and marketing for both rice and vegetables. The project made use of these youth- friendly and youth- led organisations such GYIN and NYC to streamline access within the framework of a MoU. The following capacity building activities on lucrative agro and allied job choices through the Agricultural Value Chain Interaction Platforms for rice and vegetables and had been conducted to lay the foundation for better access and utilisation of the entrepreneurship financing window and other youth support opportunities (i) counselling, mentorship and advocacy (ii) group formation, governance, leadership (iii) business management and functional literacy (iv) book-keeping and business management skills. In partnership with the Gambia Chambers of Commerce, the project facilitated the participation of 170 using different youth-friendly platforms (annual trade fairs, workshops such as "Creating Opportunities for Rural Youths (CORY), Entrepreneurship, Leadership, and Information Technology (ELIT and Rural Youth Award Ceremony as well as cross country trade fairs in Dakar Senegal. The project provided financing (start-up) capital to 100 youths on various business enterprises.

A successful youth entrepreneur that benefited from GYIN's and NEMA partnership in capacity building was Bora Kanteh of Brikamaba in CRRS "Before I was doing business in losses; I did not understand marketing strategies and customer care. With this new knowledge, I have more reliable customers now that travelled from Kombo to buy my paddy rice during the weekly market at Brikamaba. Besides, I was doing business without any savings but now I have a savings account specifically for business only and I have opened my personal account too as we were advised to do during the entrepreneurship training facilitated by GYIN-Gambia. I thank God because I now have a saving of D23, 000.00 in my business account".

# (iv) Banking and non-banking financial institution for the Matching Grant-

The project partnership with banking and non-banking financial institutions to support its strategy of increasing access to financing from the matching grant was good as a business modelling for enhancing financial management but this was not effective as desired due to inability of most of the targeted grantees (women and youths) most of whom were poor to pay the counterpart funds of 45% in most of the case and also lack collateral security