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Republic of the Gambia

**National Agricultural Land and Water Management
Development Project**

PROJECT PERFORMANCE EVALUATION





Republic of The Gambia

**National Agricultural Land and Water Management Development
Project**

Project Performance Evaluation

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Photos of activities supported by National Agricultural Land and Water Management Development Project

Front cover: Young men working in the fields in Pakalinding, Lower River Region.

Back cover: Darsilami Youth Garden (left); meeting with village members in Badari, Upper River Region (right).

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Preface

This report presents the findings of the project performance evaluation undertaken by the Independent Office of Evaluation of IFAD (IOE) of the National Agricultural Land and Water Management Development Project (Nema) in The Gambia. The Nema project followed a long line of IFAD projects in The Gambia that were dedicated to lowland rice production and targeting women farmers. Nema (2012-2019) overlapped and converged with the Participatory Integrated Watershed Management Project (2006-2014), whose lessons were applied in Nema.

The Nema project was aligned with Government and IFAD policies and priorities, and included two components on watershed development approach and commercialization. However, the key elements of Nema design turned out to be unrealistic and not well adapted to a country with fragility, and institutional weaknesses were evidently difficult to overcome. A number of the physical outputs of Nema were achieved; however, several important ones were either not achieved or delivered late. For example, some of the critical rice infrastructure was not well designed and constructed, particularly tidal irrigation. This limited the potential achievement of the project-development objectives. In addition, the late delivery of much of the commercialization component, and the pilot nature of its implementation, limited the project's market-orientation. This applied particularly to the vegetable garden, which targeted women and youth, and which seemed to have promising results.

The evaluation offers four key recommendations for ongoing and futures projects in The Gambia as follows: (i) develop a new strategy and national master plan for rice development in The Gambia, ensuring that they are informed by watershed analyses; (ii) move ongoing and future vegetable schemes in The Gambia consistently towards market, demand and private sector orientation; (iii) find a better balance between independent project management and mainstreaming in Government, and between central and decentralized management; and (iv) address the root causes of gender inequality and discrimination, using contextually appropriate upstream and downstream strategies.

I hope that the findings of this evaluation will be helpful in improving the ongoing and future operations of the collaboration between the Government of The Gambia and IFAD.

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Currency equivalent, weights and measures

Currency equivalent

Currency unit	= Gambian Dalasi (GMD)
US\$1.0	= GMD 32.26 (at design; September 2012)
US\$1.0	= GMD 64.05 (at completion; June 2020)

Weights and measures

1 kilogram	= 1,000 grams
1,000 kilograms	= 2.204 pounds
1 kilometre	= 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

Abbreviations and acronyms

AfDB	African Development Bank
ASAP	Adaptation for Smallholder Agriculture Programme
AVIP	agriculture value chain interaction platforms
AWPB	annual workplan and budget
CCA	climate change adaptation
Chosso	Strengthening Climate Resilience of the National Agricultural Land and Water Management Development Project
CISF	Capital Investment Stimulation Fund
COSOP	country strategic opportunity programme
CPE	country programme evaluation
ESMP	environmental and social management plan
FAO	Food and Agriculture Organization of the United Nations
FASDEP	Food and Agriculture Sector Development Project
FO	farmers' organization
GCAV	Commercial Agriculture and Value Chain Management Project
GEF	Global Environment Facility
GMD	Gambian Dalasi
IOE	Independent Office of Evaluation of IFAD
IsDB	Islamic Development Bank
M&E	monitoring and evaluation
MIS	market information system
MTR	midterm review
Nema	National Agricultural Land and Water Management Development Project
NRM	natural resource management
O&M	operations and maintenance
PCR	project completion report
PCRv	project completion report validation
PDR	project design report
PIWAMP	Participatory Integrated Watershed Management Project
PO	producers' organizations
PPE	project performance evaluation
PSU	project support unit
RIMS	Results and Impact Management System
ROOTS	Resilience of Organizations for Transformative Smallholder Agriculture Programme

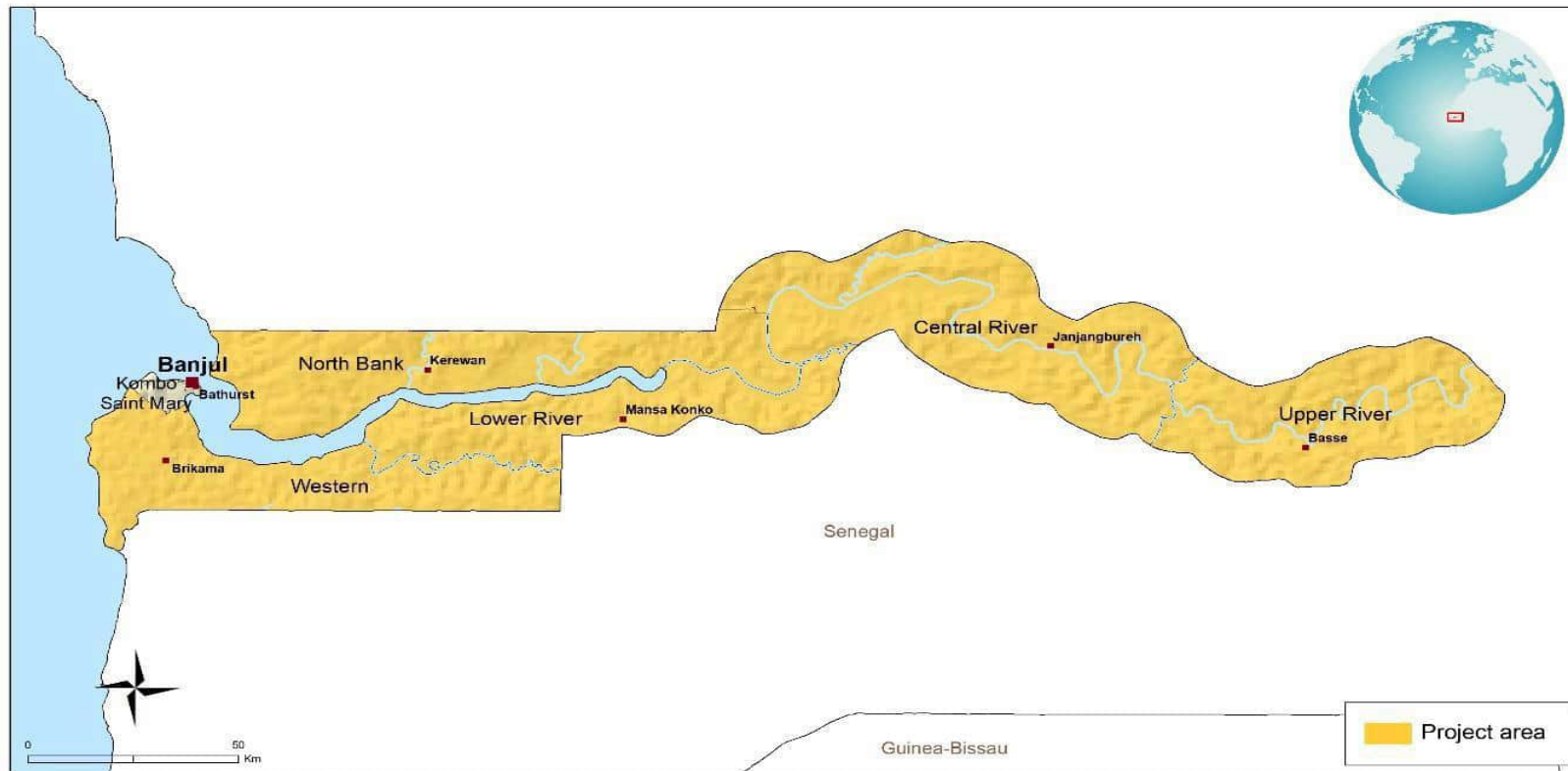
ToC	theory of change
UNFCCC	United Nations Framework Convention on Climate Change
WFP	World Food Programme
WUG	water user group

Map of the project area

Republic of The Gambia

National Agricultural Land and Water Management Development Project (Nema)

Project performance evaluation



The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.

Map compiled by IFAD | 04-03-2021

Executive summary

A. Background

1. **Project background.** The National Agricultural Land and Water Management Development Project (Nema) was a countrywide project. Its overall goal was to reduce the poverty of rural women, men and youth. The development objective was to increase income through improved productivity based on sustainable land and water-management practices. This was to be achieved through: (i) watershed development; (ii) agricultural commercialization; and (iii) project facilitation. IFAD's Executive Board approved the project on 10 December 2012. The IFAD loan agreement was signed on 20 December 2012 and the loan became effective on the same day. The project was completed on 30 June 2020, after an extension of 6 months of its original scheduled completion date of 31 December 2019.
2. At design, the Nema project was approved for a total of US\$76.59 million, including co-financing by the African Development Bank and the Islamic Development Bank (see table 1). IFAD's costs included two grants under the debt sustainability framework, totalling US\$27.3 million, a loan of US\$7 million and an additional grant of US\$5 million under the Adaptation for Smallholder Agriculture Programme. Actual project disbursement was reported as US\$58.92 million; this included the co-financing by the African Development Bank and the Islamic Development Bank, which was managed separately by the Government through the Nema Project Support Unit.
3. **Evaluation scope and approach.** The project performance evaluation was undertaken in accordance with IFAD's Revised Evaluation Policy (IOE 2021a) and the IFAD Evaluation Manual Second Edition (IFAD 2015b). The scope of the Nema evaluation was defined within the context of the 2016 The Gambia Country Programme Evaluation, and a desk review case study in the Independent Office of Evaluation Synthesis Report of Infrastructure in 2020. The evaluation adopted a mixed modality approach, which included a desk review of project documents, remote interviews with key project stakeholders, and in-person interviews in the project communities, given the context of the COVID-19 pandemic.

B. Main findings

4. **Rice production infrastructure development.** The Nema approach for higher rice productivity entailed improving water control and access, as well as land development and rehabilitation. The design and construction for improved rice schemes, both tidal-irrigated and traditional swamp rice, did not consider challenges such as the limited availability and capacities of private sector companies in land development. The absence of specialized irrigation and rural infrastructure engineering expertise within the Nema Project Support Unit affected quality of work and infrastructure sustainability.
5. Despite some positive stories of communities benefiting from the rice production infrastructure, the extent to which Nema outputs and other activities contributed to the production and productivity objectives remained unclear. There were no reliable monitoring and evaluation data on utilization, productivity gains of rice infrastructure and adoption of improved agricultural, climate smart practices and technologies.
6. **Vegetable production by women and youth.** Vegetable gardens had strong achievements, in terms of productivity and sustainability, beyond the Nema project. This was largely because the gardens followed a standard design with clear specifications for materials. Still, many gardens had their own problems with operational performance of water infrastructure, boreholes and piping. Most farmer organizations/groups managed to take care of these problems themselves. Standard designs also meant that in some cases the vegetable gardens were not sufficiently site-specific, and did not address the challenges of each site and the specific needs of the beneficiaries.

7. **Sustainable management of watersheds and climate resilience.** Nema-Chosso reached its nominal output targets on resource restoration, for example community-managed agroforestry, building fences for woodlots and participative mangrove restoration. Climate games generated climate awareness. The actual adoption by farmers of climate-resilient practices and their impacts were never recorded. At the national level, the Chosso grant supported the Government and the United Nations Framework Convention on Climate Change focal point in reviving the National Climate Change Committee and institutionalizing and mainstreaming climate change in policies and strategies. Climate change adaptation and natural resources management outcomes were only partly satisfactory, due to the late start of the Chosso grant, cancellation of planned lowland activities and lack of integration of Chosso and Nema interventions. In addition, the adoption of climate-smart infrastructure design was a missed opportunity due to the late start of the Chosso activities.
8. **Commercialization.** There were tangible achievements for agricultural commercialization and market access. Three of the four-component output targets were reached: (i) producer organizations and farmers using a Market Information System and becoming more involved in group sales; (ii) the number of youth starting businesses; and (iii) farm-to-market access roads. The extent to which these achievements actually contributed to lasting enhancements of rural business provision, market sales and farmer prices for agricultural and horticultural products, as well as to higher incomes for producers and new businesses, remained unclear. The projects established fewer linkages to private sector market demand than envisaged at design. This was in part because many of the activities came at a late stage, except for the provision of 24 capital investment matching grants, the construction of market-access roads and the creation of some market outlets.
9. **Matching grants.** Matching grants introduced by Nema under the Capital Investment Stimulation Fund were a new and innovative concept for The Gambia. However, it was not appropriately designed and targeted to achieve the expected outreach and impact. The grants were not sufficiently oriented towards market businesses and IFAD target groups. In addition, they were only partly linked with Nema's infrastructure development and the total number of grants delivered was relatively small. This was a result of failure by applicants to fulfil all conditions such as down payments and business plans.
10. **Overall project achievement.** Evidence of success was mostly observed in the women- and youth-managed vegetable gardens, which were found to be profitable and economically empowering. However, the achievement of expected results was largely moderate given the patchy evidence on improvements in production, productivity, food security and household incomes. Poverty impact could not be demonstrated, as monitoring and evaluation and impact assessments were weak. In addition, little attention was given to changing gender roles and labour and technology effects, such as in intensified rice production. Long-standing sociocultural norms that drive gender inequality were not addressed, in order to make gender-transformative contributions.

C. Conclusions

11. **The Nema project supported complex but appropriate rice infrastructure development approaches.** These were constrained by gaps in design, quality of construction, and operations and maintenance. The social, environmental, economic and gender aspects of rice production in the different ecologies in The Gambia were not always sufficiently considered, especially for tidal irrigation. Constructed infrastructure often did not have the technical quality to make rice production profitable and sustainable, or even permit farmers to use it. Public capacity for planning and overseeing investments in the rice sector remains weak. The integration of climate change adaptation and natural resource management in mini-watershed development and infrastructure planning was not sufficiently

considered. Climate-smart infrastructure and production technologies deserve to receive more attention at design. The time appears right to pilot an integrated watershed approach in a few mini watersheds, for the ongoing project under the Resilience of Organizations for Transformative Smallholder Agriculture Programme (ROOTS).

12. **Progress was limited towards resolving the problem of low sustainability in rural infrastructure.** This includes weak quality and profitability due to lack of shared management arrangements between beneficiaries and Government after project completion. The infrastructure build–bust–build back cycle has not been broken, except in some of the vegetable garden schemes. Government still relies on a continuous line of donor-financed projects to carry out major infrastructure maintenance and rehabilitation. Beneficiaries cannot shoulder the technical, financial and input challenges, even when trained in operations and maintenance.
13. **Investments in women and youth vegetable gardens are only sustainable in the long run if they are firmly embedded in strong market and demand linkages.** The Nema project was only successful in very few gardens in expanding such linkages and ensuring that women and youth-managed groups were well equipped to work for the market, through better skills and smarter storage and transport facilities. More market-oriented private sector expertise is required. Some experiences have been gained through Nema in involving women and youth, as groups or individuals, in such marketing schemes, and in learning how to overcome their business and finance constraints.
14. **Many new ways of operations brought forward by Nema will require adjustments and adaptive management.** In particular, infrastructure for women in rice, market-demand orientation for women’s and youth’s vegetable gardens, and a mechanism to ensure the sustainability and ownership of different types of infrastructure. Improvements to monitoring and evaluation and evidence-based decision-making in The Gambia are essential for that. The lack of adequate information in Nema on the effects of actual adoption, and on agricultural productivity and benefits, is not in line with IFAD standards and expectations.

D. Recommendations

15. **Recommendation 1: Support the development of a new strategy and national master plan for rice development in The Gambia, ensuring that they are informed by watershed analyses.** This would include a stocktaking of the current technical and business models for rice production and marketing, and the updating of existing feasibility studies and their social, environmental, economic and gender effects. Institutional roles, capacities and development needs of public and private actors, including construction contractors, deserve attention. It is also recommended that site-specific rice-development plans be developed, using holistic mini-watershed approaches, with long-term sustainability and climate adaptation as key considerations. Such approaches could be piloted through the ROOTS project. The potential of external support for rice and land development, through technical assistance and South-South cooperation, should be explored. IFAD could use its experience and comparative advantage in The Gambia to facilitate buy-in and contributions from development partners in the sector.
16. **Recommendation 2: Move ongoing and future vegetable schemes in The Gambia consistently towards market, demand and private sector orientation.** More public and private institutions with specialized technical and first-hand professional business and market experiences need to be engaged in creating demand linkages with vegetable growers. The development of capacities of responsible institutions towards adoption of commercial approaches should be done early on in projects. There is a need to better identify market challenges according to the type of market, product and market conditions (prices, demand and supply).

Despite the challenges of contract farming so far, the concept should be revisited and promoted alongside other marketing approaches.

17. IFAD's focus on women and youth calls for their better access to capital for market opportunities. The Capital Investment Stimulation Fund/matching grants initiative may need to be redesigned, to direct its execution more towards IFAD target groups. The challenges faced by women and youth in accessing financial services, due to lack of collateral, makes it imperative to resolve complicated issues around tenure security. Alternative approaches for increasing finance access, such as asset-based financing (leasing) and savings as a pathway to personal wealth, need to be emphasized.
18. **Recommendation 3: Ensure sustainability and ownership by adopting an exit-at-entry approach for ongoing (ROOTS) and future projects.** The development and implementation of exit strategies for sustainability should start at the beginning of project implementation. This would include stronger community ownership of project infrastructure through informed and continuous participation in infrastructure design, construction for quality and sustainable manageability. Projects should consider piloting community-based operations and maintenance, through community funds that are self-managed by groups or communities and made available early on in the project to allow for ongoing learning and refinement.
19. **Secondly, find a better balance between independent project management and mainstreaming in Government, and between central and decentralized management.** The ongoing ROOTS project should consider progressively developing Government planning and budgeting capacities for infrastructure sustainability, to build long-term public commitment and coherence. This could be achieved through stronger integration of certain project activities into responsible Government agencies. More Government ownership is called for in policy, strategy and quality oversight, connectedness between Government departments across ministries, and engagement of regional and other decentralized structures.
20. **Recommendation 4: Address the root causes of gender inequality and discrimination, using contextually appropriate upstream and downstream strategies.** This will require a comprehensive gender analysis for ongoing and future projects, to review and protect women's rights and to better understand regulatory and legal pathways to facilitate women's access to land for rice and vegetable production and other resources. IFAD in the Gambia should adopt an integrated upstream and downstream approach towards the legal and customary frameworks related to women's access to land, capital and other resources. Upstream this requires working on family law, especially inheritance and marriage, to promote joint land ownership and inheritance rules that are more favourable to women. Downstream, projects should apply behavioural approaches through awareness campaigns that involve men and engage them as positive change agents for access, control and ownership of resources by women.
21. As customary rights often prevail over the official legal system in The Gambia, ongoing and future projects should engage in a structured, continuous dialogue with traditional community leaders and authorities, to progressively influence negative gender norms in agriculture and identify gender win-win situations. Similarly, dialogue between men and women should be promoted and encouraged within households. Specific gender-related activities and interventions need to be sufficiently planned and budgeted for at design, including indicators to monitor and track progress.

IFAD Management's response¹

1. Management welcomes the findings of the project performance evaluation (PPE) of the National Agricultural Land and Water Management Development Project in the Gambia, conducted by the Independent Office of Evaluation of IFAD (IOE). Management appreciates the participatory approach adopted by IOE in conducting this evaluation and the good interaction achieved at each step of the process in spite of the challenges posed by the COVID-19 pandemic context.
2. The PPE duly reflects the comments provided by the country team and Government. It acknowledges the key results achieved by Nema and provides a fair judgment on the quality of the Nema project completion report (PCR). Management is in agreement with the overall assessment provided in the PPE, and the ratings assigned to the key evaluation criteria.
3. Management also concurs with the findings of the evaluation, including on the strengths and weaknesses of the project, and the results and impact achieved, as well as the areas where improvements are needed. The latter include data availability and quality at project-management level.
4. Management agrees with all four recommendations set forth in the PPE, which are being internalized and followed up on. Further details on Management's view and proposed action on each recommendation are presented below.
 - a) **Recommendation 1.** Support the development of a new strategy and national master plan for rice development in The Gambia while ensuring that they are informed by watershed analyses.

Agreed. In its next country strategic opportunity programme, IFAD will thoroughly explore possibilities to expand its support to the Government in the preparation and validation of a new strategy and a comprehensive master plan for the development of the rice value chain in the Gambia. As recommended, IFAD's support would include, but not be limited to, helping the Government take stock of the current technical and business models for rice production and marketing; and updating existing feasibility studies and analysis on the social, environmental, economic and gender effects of such business models.
 - b) **Recommendation 2.** Move ongoing and future vegetable schemes in The Gambia consistently towards market, demand and private sector orientation.

Agreed. IFAD will make efforts in reinforcing its collaboration with the national private sector actors to: (i) improve value chain approaches through matching grants; (ii) attract youth in transportation, processing and marketing schemes; and (iii) better link production farms, markets facilities and consumers, while ensuring quality of produce.
 - c) **Recommendation 3.** Ensure sustainability and ownership by adopting an exit-at-entry approach for ongoing (ROOTS) and future projects.

Agreed. In addition to the draft exit strategy prepared during the design process and included in the project design report of ROOTS, IFAD will ensure, in close cooperation with national counterparts, that the development and effective implementation of a comprehensive and inclusive exit strategy start at the very beginning of the project implementation. Moreover, the developed exit strategy will be presented to all stakeholders during the start-up workshop of the project, specifying the role and responsibilities of each of the stakeholders, including implementing partners and the project end beneficiaries.

¹ The Programme Management Department sent the final Management's response to the Independent Office of Evaluation of IFAD on 21 April 2022.

- d) **Recommendation 4.** Address the root causes of gender inequality and discrimination, using contextually appropriate upstream and downstream strategies.

Agreed. ROOTS has already conducted a National Policy Dialogue Forum on Women's Land Rights, with the objective to spur reflection on the situation of land policies in the country. The outcomes of that policy dialogue platform highlighted three major obstacles to women's land rights in The Gambia: (i) gaps in implementation and lack of awareness and enforcement; (ii) overlapping and contradictory legal systems; and (iii) social norms regarding land and their relationship to practices of recognition and exercise of rights. In addition to the above, IFAD will, through the policy engagement window and institutional support provided to the Government, conduct a diagnostic in order to have a better understanding of the root causes of the gender inequalities in The Gambia.

5. Management thanks IOE for the fruitful process and will ensure that the findings and lessons learned from this exercise are internalized, to further improve the performance of IFAD-funded programmes and projects in The Gambia and West and Central Africa as a region.

Republic of The Gambia

National Agricultural Land and Water Management Development Project

Project Performance Evaluation

I. Evaluation objectives, methodology and process

1. In line with the IFAD Evaluation Policy, the Independent Office of Evaluation of IFAD (IOE) undertook a project performance evaluation (PPE) of the IFAD-financed National Agricultural Land and Water Management Development Project (Nema-Chosso) in The Gambia.¹
2. **Objectives.** The objectives of the evaluation were to: (i) provide an independent assessment of the overall results of the project; (ii) generate findings and recommendations for the design and implementation of ongoing and future operations in The Gambia, in particular the Resilience of Organizations for Transformative Smallholder Agriculture Programme (ROOTS) project (approved by IFAD in December 2019); and (iii) identify issues and inform ongoing and future evaluative work related to the corporate and/or strategic domains.
3. **Scope.** The Nema-Chosso project was included in the 2016 Gambia Country Programme Evaluation and as a desk review case study in the IOE Evaluation Synthesis Report on Infrastructure at IFAD in 2020. In light of these previous evaluations, the scope of the PPE was determined based on the following criteria: (i) areas that were identified through desk review, and issues raised in the 2016 country programme evaluation (CPE) and the 2020 Evaluation Synthesis Report case study that warranted further attention; (ii) selected issues of strategic importance for IFAD in The Gambia; and (iii) limitations set by the available time, budget and possible COVID-19 restrictions. The PPE includes the entirety of the Nema-Chosso project, i.e. the original Nema project (2012-2020) and additional financing, including the Chosso Adaptation for Smallholder Agriculture Programme (ASAP) grant (2015-2020). The PPE selectively focused on issues where value could be added, such as watershed management and climate change adaptation, infrastructure sustainability, market access, gender-transformative change and capacity development. The scope of the PPE was also defined within the context of the ongoing COVID-19 pandemic, which limited the possibility for IOE to deploy international missions to conduct primary data collection in the country.
4. **Methodology and process.** The PPE was undertaken in accordance with the revised IFAD Evaluation Policy (IOE 2021a) and the IFAD Evaluation Manual Second Edition (IOE 2015). It adopted a set of internationally recognized evaluation criteria and a six-point rating scale (annexes II and III, respectively) to assess the performance of the project.
5. The evaluation applied a mixed-methods approach of desk reviews, interviews with key informants and field visits, based on a theory of change (ToC). The project design report (PDR) did not provide a ToC. Hence, it was reconstructed on the basis of a desk review and interviews with Gambian project stakeholders, taking into account recommendations and revised targets of the midterm review (MTR) (annex IV). To address the key evaluation issues, evaluation questions were posed along evaluation criteria. An evaluation framework was prepared to present these questions and the sources of data (annex VI). The methods deployed consisted of individual and group interviews with project stakeholders, beneficiaries and other key informants and resource persons, and direct observations.

¹ The last IOE project evaluation in The Gambia took place in 2004, an interim evaluation. There had been a prior project evaluation of the Jahally Pacharr rice development project in 1993.

6. The evaluation team was led by IOE and included a senior international and two national consultants. Given the ongoing COVID-19 restrictions on international travel, owing to the COVID-19 pandemic, the international team members conducted remote interviews with key project stakeholders and development partners via Zoom and WhatsApp. In addition, a team of national consultants conducted field-level data collection in The Gambia, in strict accordance with the World Health Organization and national guidance and standard operating procedures on limiting the spread of COVID-19. The national team members were guided and directed by the IOE lead evaluator and the senior international consultant.
7. A review of available documents was undertaken to obtain existing data, and Nema monitoring and evaluation (M&E) data were utilized where possible. The national PPE team carried out extensive in-country data collection and stakeholder and beneficiary interviews (online and in person). A field mission was conducted from 28 September to 5 October 2021. This included 17 focal group interviews with beneficiaries, using a stratified random sample approach determined by activity clusters across the country. These sites represented between 4 and 40 per cent of major Nema activities (table 8 in annex VII). Much of the information from these field visits was triangulated through key informant interviews with Nema service providers and construction contractors. These interviews largely confirmed the basic findings from the field.² Within the sampled sites, the PPE covered the gamut of project stakeholders – including farmer groups, frontline staff and local authorities. The sampling method, mission itinerary and list of people met are annexed to this report (see annexes VIII and IX, respectively).
8. An online wrap-up meeting was held on 18 November 2021 with IFAD and the Government of The Gambia stakeholders to validate findings, share emerging messages and inform stakeholders of the next steps. This was followed by report drafting and peer review.
9. **Data availability and limitations.** The PPE used a fair amount of project-level data from the Nema project, such as quantitative information on physical targets and achievements by the PCR (IFAD 2021b)³ that mainly relied on internal project M&E. Project M&E was assessed as weak by the MTR but improved since then (2019 Supervision Report). The project prepared two completion impact studies: a 2019 Results and Impact Management System endline impact survey for the project as a whole, and a separate 2019 Resilience impact assessment for the Chosso subcomponent.^{4 5} These studies provided useful background information and some conclusions for the PPE, but were limited in scope and methods and contained only occasional references to project interventions. Many of the project infrastructure and other investments came very late and were only completed in 2019, some only after the endline surveys. During the evaluation, members from the Nema Project Support Unit (PSU) were able to fill some of the data gaps but not all requested information could be retrieved. The PPE decided to forgo remote sensing, since geo-referenced coordinates for most project activities were not readily available.
10. The PPE triangulated findings from the PCR with interviews of key informants from the Government, Nema service providers, international development partners and regional IFAD country officials. Representatives from Government departments and

² Please see annex VII for detailed observations by visited villages.

³ See Appendix 1 – Project Log Frame; Appendix 4 with a detailed analysis of the Internal Rate of Return).

⁴ The RIMS survey conducted its data collection in May 2019, and refers back to a baseline survey done in 2013. It is based on a comparison of key trends in certain household assets and socio-economic variables in a sample 30 of project intervention locations. It does not relate its results to any specific project interventions, and is not an impact study in the narrow sense (i.e. with control group).

⁵ The Chosso Resilience impact assessment was completed in December 2019 and compares the change of household resilience indicators in 18 intervention villages of the Chosso sub-component based on a baseline survey in these villages in June 2017. Many of the Chosso intervention sites differ from those of the remainder of the Nema project and it remains to be seen how much geographic overlap there is between the two surveys.

high-level officials from the two key executing ministries (Agriculture and Environment) made themselves available.⁶ The evaluation team also interviewed most of the previous staff of the Nema project and apex organizations of farmers and producer organizations.

11. In the absence of a field mission by the international team members, added risks were mitigated by selecting national team members who had no prior engagement with IFAD in The Gambia, and specifically not with the Nema-Chosso project. The collection of factual evidence was emphasized during field visits, including through photographs and videos (for example of infrastructure developments) to reduce biases in interpretation. An external reviewer was employed to cross-check contextual information and enhance the quality of the analysis through peer review of the draft evaluation report.

⁶ Representatives of the Ministry of Finance were not available despite several efforts made.

II. Project and country context

A. Country background

12. The Republic of The Gambia is a small country in the Sahel Region of West Africa. Stretching 450 km along the Gambia River, the country is surrounded by Senegal except for a 60-km Atlantic Ocean front. The country, totalling only 10,689 square km in size, has a population of 2.5 million (UNFPA 2021).
13. The Gambia is among the poorest countries in the world, and with 176 people per square km, one of the most densely populated countries in Africa (United Nations 2021). Despite a significant increase in life expectancy between 1990 and 2015, poverty levels have remained essentially unchanged, currently at 48 per cent (World Bank 2021b). Agriculture is the country's largest sector, accounting for approximately 27 per cent of Gross Domestic Product in 2012, and employing approximately 70 per cent of the labour force (World Bank 2021a). Food insecurity is estimated at about 8 per cent of the population – the country produces only approximately 50 per cent of its domestic food requirements. Smallholder farmers are highly dependent on varying rainfalls during a single season and on swamp rice production in the marshes of the Gambia River. Many small farming households do not yet produce a marketable surplus (WFP 2021). A growing tourism industry also provides opportunities for smallholder sales.
14. **The Gambia is a country with social and institutional fragility.** (The World Bank n.d.). The legacy of authoritarianism, limited capacity of public administration and public institutions, unsustainable fiscal balances, and vulnerability to weather-related shocks are the most salient causes of state fragility. Notably, the country experienced a constitutional crisis and state of emergency following the December 2016 Presidential Election. After the 22-year rule of former President Yahya Jammeh, the democratically elected administration of President Adama Barrow has been aiming to address political, social and economic challenges over the past four years. An election campaign for a new Government was ongoing at the time of the PPE country mission, with elections set for December 2021.
15. **The Gambia is also one of the world's most vulnerable countries to adverse climate change impact,** ranking 141st out of 181 countries according to the University of Notre Dame Global Adaptation Index (2021). Its agriculture sector is exposed to increasingly frequent weather-related shocks and increasing salinization of lowland rice-producing areas. Rapid population growth is intensifying environmental pressure, and the country's weak public institutions are incapable of enforcing environmental protection measures.
16. **The climate challenge.** The Gambia has a long history of climate challenges, with changing rainfall patterns and frequent droughts. Climate adaptation and resilience are a mainstreamed goal in The Gambia. The diversification of income sources across different agroecologies, and income-generating activities in river basins and uplands, has a long tradition in The Gambia and the Sahel, including through transmigration.
 - (i) **Policies on rural development, natural resources management and agricultural growth**
17. The country's national-development and poverty-reduction frameworks at the time of Nema's design included the Government of The Gambia's Vision (1996-2020) and the Programme for Accelerated Growth and Employment (2012-2015). The project was aligned with the Gambia National Agricultural Investment Plan (2011-2015) and the Millennium Development Goals of 2010-2015, which all focused on reducing food insecurity and poverty, and sustaining the environment and gender equity (IFAD 2021b). More recently, the Government's medium-term strategy has been laid out in the National Development Plan 2017-2020. The Plan envisioned a transition to a green economy, small- and medium- sized private sector investment, and stronger inclusion of youth and women as key economic actors. Climate-smart agricultural

technologies are also emphasized. The Plan identifies three agricultural sub-sectoral priorities: rice, horticulture and livestock. The Gambia National Gender Policy 2010-2020 and National Youth Policy 2009-2018 are also relevant for rural development, and aim to increase inclusion and promote equitable access to resources, training and empowerment for women and youth.

18. The Agriculture and Natural Resources Policy 2009-2015 identified the core challenges facing agricultural development in The Gambia. The Policy was updated in 2017 along with the Supplementary Agriculture and Natural Resource Policy 2017-2026, focusing on the natural resources sub-sector, in which capacity development and public-private partnerships were identified as priorities for transitioning to an inclusive green economy. The main thrust of the policy is to develop “a market-led commercialized, efficient, competitive and dynamic agriculture and natural resources sector in the context of sustainable development”, and to contribute to economic growth through natural capital that is fully developed and sustainably managed.

(ii) **IFAD’s position and role in the Gambian context**

19. Since the beginning of its operations in the country in 1982, IFAD has supported 10 projects and programmes in The Gambia for a total project/programme cost of approximately US\$196.8 million; of this total, US\$73.1 million was provided as IFAD loans. IFAD loans were originally provided on highly concessional terms until the approval of the Livestock and Horticulture Development Project in 2009, when projects were on an all-grant basis through the Debt Sustainability Framework. Since 2014, The Gambia has been classified as a “yellow” country, so new contributions to current or future operations will be approved under a 50 per cent grant-50 per cent loan division on highly concessional terms.
20. In 2003, the Fund formulated its first Country Strategic Opportunity Programme.⁷ The revised Programme of 2012 identified three strategic areas: (i) integrated watershed management; (ii) improved rural finance; and (iii) diversification of on- and off-farm sources of income. The most recent Programme (2019-2024) was designed for implementation through a single large project, and has two strategic objectives: (i) enhancing productivity and resilience of family farms through sustainable management of natural resources and adaptation to climate change, with a focus on youth and gender impacts; and (ii) improving management capacity and inclusiveness of professional farmers’ organizations (FOs)/cooperatives, and enhancing farmers’ access to communal assets, markets and profitable agricultural value chains.

B. The project

21. **Project area, goal and objectives.** Nema-Chosso has been a country-wide programme.⁸ Its overall goal was to reduce the poverty of rural women, men and youth. The development objective was to increase incomes from improved productivity, based on sustainable land and water management practices and better market access.
22. **Project components.** This would be achieved through implementing three components, namely: (i) watershed development; (ii) agricultural commercialization; and (iii) project facilitation. The project was designed to combine investments in productive infrastructure and human capital, expressly to generate increased

⁷ The 2003 COSOP focused on four strategic objectives: (i) strengthen and empower farmers' organizations and community-based self-help groups in: (a) planning and managing their lowlands and uplands; (b) developing and running sustainable microfinance institutions and networks; (c) improving their living conditions and working together; (ii) support agricultural production by promoting and disseminating adapted technologies designed to increase productivity of rice and a variety of diversified crops selected on a market-driven basis; (iii) support the development and consolidation of rural microfinance institutions by strengthening the Village Savings and Credit Associations network, improving marketing channels and information, and providing support to commodity market organization; and (iv) develop a community-based awareness campaign on HIV/AIDS.

⁸ By project mid-term (2018), the emphasis of project locations was upstream and in areas with lower population densities on the North Bank. There is no updated map or list of project sites in the Project Completion Report.

sustainable incomes for farmers and agriculture-related enterprises (IFAD 2015a). Nema was designed based on a value-chain approach, with elements of community-based development and attention to watersheds, natural resource management (NRM) and climate change adaptation (CCA).

23. **Climate resilience.** The Chosso grant of US\$5 million in 2015, under ASAP, added specific provisions to the Nema project to address climate change, with the promotion of sustainable agricultural practices for soil and water management, direct soil-fertility improvements through compost chambers, and mangrove restoration, agroforestry and woodlots restitution.
24. **Project target groups.** The project was primarily designed for women, who are the core rice and vegetable producers in the country. Rural, poor young men and women were targeted with market-oriented vegetable production and agricultural businesses. A secondary target group were value-adders, service providers and operators in the rice and vegetable markets, including producers' organizations (POs) and small and medium enterprises. The entry point for the project was through organized groups of producers, with emphasis on women and youth groups. Priority was given to consolidating the achievements of those women groups reached by previous and ongoing IFAD-supported projects (IFAD 2015a, para. 26-30).
25. **Timeframe.** The project was approved by IFAD's Executive Board on 10 December 2012. The IFAD loan agreement was signed on 20 December 2012 and the loan became effective on the same day. The project was completed on 30 June 2020, after an extension of six months to its original scheduled completion date of 31 December 2019.
26. **Project cost and finance.** At design, the Nema project was approved for a total of US\$76.59 million, including co-financing by the African Development Bank (AfDB) and the Islamic Development Bank (IsDB) (see table 1). IFAD costs included two IFAD grants under the debt sustainability framework, totalling US\$27.3 million, an IFAD loan of US\$7 million and an additional grant of US\$5 million, under ASAP. The ASAP grant was designed to strengthen the climate resilience of the targeted households, and was thus named "Chosso", meaning "change" in the local language. A separate PDR for the ASAP grant was finalized in October 2015.
27. **Actual project disbursement was reported as US\$58.92 million.** This includes co-financing by AfDB and IsDB, which was managed separately by the Government, but also through the Nema PSU. Support under the AfDB and IsDB cofinancing was to focus on the watershed component and on infrastructure. The project had high disbursement rates for the different sources of IFAD funds (all around 99 per cent) and 83 per cent for AfDB funds, but significantly lower disbursement rates for Government, beneficiary and IsDB contributions (78, 53 and 25 per cent, respectively). Sixty-one per cent of funds were dedicated to watershed development and 22 per cent to agricultural commercialization; the remainder was for project facilitation (table 2).

Table 1

Source of funds committed at appraisal (including parallel co-finance) and actual disbursements at closure (IFAD and domestic funding only), US\$ millions

	<i>Approval</i>	<i>% of total</i>	<i>Actual (PCR)</i>	<i>Disbursement rate (PCR)</i>
IFAD Grant - Original	20.28	26.4%	18.66	99.0%
IFAD Grant – Additional (IFADGB)	7.07	9.2%	6.99	98.9%
IFAD Loan – Additional (IFADL)	7.07	9.2%	6.99	99.0%
IFAD ASAP Grant (Chosso)	5.00	6.5%	4.96	99.2%
Co-financier AfDB	17.70	23.1%	14.60	82.5%
Co-financier IsDB	15.00	19.6%	3.65	24.4%
Government	2.84	3.7%	2.20	77.6%
Beneficiaries and domestic lenders	1.63	2.1%	0.87	53.4%
Total	76.59	100%	58.92	76.93%

Source: IFAD, 2021b (Nema PCR).

Table 2

Project financing by component (IFAD and domestic funding only), US\$ millions

	<i>Approval</i>	<i>% of total</i>	<i>Actual (PCR)</i>	<i>% of total</i>	<i>Disbursement rate (PCR)</i>
Watershed development	27.94	63.7%	24.68	61%	88.35%
Agricultural commercialization	10.08	22.9%	8.93	22%	88.6%
Project facilitation	5.87	13.4%	6.86	17%	116.9%
Total	43.89	100%	40.47	100%	92.2%

Source: IFAD, 2021b (Nema PCR).

28. **Alignment with other IFAD projects.** Nema followed a long line of IFAD projects in The Gambia that were dedicated to lowland rice production and targeting women farmers. Nema (2012-2019) overlapped and converged seamlessly with the Participatory Integrated Watershed Management Project (PIWAMP) (2006-2014), whose lessons were applied in Nema. PIWAMP itself was regarded as a second phase of the Lowlands Agricultural Development Programme 1995-2004 (IOE 2018).⁹ Nema was designed to complete the remaining 4 years of this 20-year programme and maintain a sequenced continuity with this partnership (IFAD 2021b). Prior to that, the first project ever for IFAD to invest in The Gambia was that of Jahally-Pacharr (1982-1992), a co-financed project in the Central River Region with mixed pump- and tidal irrigation.¹⁰ Lessons from Jahally-Pacharr led to IFAD's long-term engagement and focus on tidal irrigation and gradual improvements in traditional women's rice production.
29. Over time, support for production progressively shifted towards enhancing income opportunities and resilience to climate change, while also emphasizing improved access to markets and business development. Nema significantly scaled up previous IFAD projects in The Gambia, partly due to the availability of additional Debt

⁹ PIWAMP PCR, para. 2.¹⁰ The Jahally-Pacharr project was evaluated by IOE in 1993. The evaluation showed lower costs, management requirements and higher sustainability for tidal than pump-irrigation, and more favorable outcomes for women. Some areas developed under Jahally-Pacharr were part of the rehabilitation work under Nema.

Sustainability Framework funding (table 3). Compared with PIWAMP, IFAD finance for Nema was more than five times larger.¹¹ For the decade, IFAD turned into the largest donor for agriculture in The Gambia, covering about one third of all donor investments, followed closely by AfDB (table 7, annex VII). Most recently, IFAD approved another project, similar to Nema: ROOTS, with IFAD costs amounting to about half of those for Nema (IFAD 2019d).¹² Building on the successes and lessons drawn from IFAD’s ongoing and past projects, including Nema, ROOTS plans to consolidate and scale up rice-production schemes and vegetable gardens (in five regions) and enhance access to markets (PDR).

Table 3
IFAD projects in The Gambia with focus on infrastructure and women

	<i>Period</i>	<i>IFAD finance US\$ m</i>	<i>Co-finance US\$ m</i>	<i>Co-financiers</i>	<i>Total costs US\$ m</i>
Jahaly-Pacharr	1982-1992	5.2	10.8	AfDB, KfW, WFP Netherlands	17.0
LADEP	1995-2004	5.1	5.7	AfDB	11.7
PIWAMP	2006-2014	7.1	7.1	AfDB	17.5
Nema	2012-2019	40.1	32.7	AfDB, IsDB	77.8
ROOTS	2019-2022	21.3	26.5 (20.6)	OFID, GEF, AFD (Finance gap)	80.0

Source: IOE 2020 (Evaluation Synthesis Report on Infrastructure at IFAD).

30. **Implementation arrangements.** The Ministry of Agriculture was the executing agency for Nema and the project was managed by a PSU under the Central Project Coordination Unit of the Ministry of Agriculture (IFAD 2021b, para. 142).¹³ Various public, civil society organizations and private service providers played a critical role in the Nema project, as main contractors and community facilitators.

¹¹ Apart from PIWAMP Nema also follows and to some extent ‘scales up’ the completed IFAD Rural Finance Project (RFP) and Livestock and Horticulture Development Project (LHDP) in The Gambia.

¹² ROOTS; Nov. 2019, President’s Report submitted for approval.

¹³ Nema PDR, para. 142 ff.

Key points

- The Gambia is a small country in the Sahel Region of West Africa, with a population of 2.5 million. It stretches 450 km along the Gambia River and is surrounded by Senegal, except for a 60-km Atlantic Ocean front. The country is only 10,689 square km in size.
- Agriculture is the country's largest sector, accounting for approximately 27 per cent of Gross Domestic Product. The sector employs approximately 70 per cent of the labour force, the bulk of whom are women.
- IFAD began operations in The Gambia in 1982, supporting 10 projects with investments totalling approximately US\$196.8 million; of this total, US\$73.1 million was provided on highly concessional loan terms. With the approval of the Livestock and Horticulture Development Project in 2009, projects were on an all-grant basis through the Debt Sustainability Framework. From 2014, The Gambia was classified as a "yellow" country, with new contributions approved on a 50 per cent grant-50 per cent loan on highly concessional terms.
- The objectives of the evaluation were to: (i) provide an independent assessment of the overall results of the project; (ii) generate findings and recommendations for the design and implementation of ongoing and future operations in The Gambia, in particular the ROOTS project; and (iii) identify issues and inform ongoing and future evaluative work related to the corporate and/or strategic domains.
- Nema was a countrywide project with the objective of increasing incomes through improved productivity, based on sustainable land- and water-management practices and better market access. This was to be achieved through watershed development, agricultural commercialization and attention to NRM and CCA.
- At design, the estimated project costs were US\$76.59 million, including cofinancing by the AfDB and IsDB. IFAD costs included two IFAD grants under the debt-sustainability framework, totalling US\$27.3 million, an IFAD loan of US\$7 million and an additional grant of US\$5 million, under the ASAP.

III. Main evaluation findings

A. Project performance and rural poverty impact

Relevance

(i) Alignment with national and IFAD policies

31. **The Nema project was fully aligned with the national policies for rural development and agricultural diversification.** At the time of design, the Government had made food, nutrition security and natural resource protection a national priority, as well as delivering benefits through the inclusion of women and youth.¹⁴ The project focus on markets and business, natural resource protection and climate resilience was visionary in view of emerging Government priorities after the 2016 political change. Strong Nema support for higher rice productivity and production, through enhanced infrastructure and other agricultural inputs, underscored the high policy priority of the Government in achieving self-sufficiency for this staple food in The Gambia. Nema was also fully aligned with the Comprehensive Africa Agricultural Development Programme, the Gambia National Agricultural Investment Programme and the West Africa Agricultural Productivity Program.
 32. **The project was in line with the main thrust of The Gambia Country Strategic Opportunities Paper of September 2003.** The IFAD Country Portfolio Review of October 2011 and lessons from the PIWAMP 2010 MTR were taken into account in design. The Nema project explicitly pursued mainstreaming of gender, environment and climate change; the latter was gaining increasing importance in IFAD at the time of design (IFAD 8 and 9). The project was fully compliant with guiding principles of various IFAD policies and frameworks, such as IFAD's Strategic Framework, environment and natural resources management policy, and targeting and gender strategies (IFAD 2021b, annex 12, p. 157). Nema design capitalized on IFAD's long history and experiences in The Gambia in reducing poverty by supporting women-inclusive and nutrition-sensitive activities and value chains.
- (ii) **Quality of design**
33. **Nema design provided a convincing rationale and coherent approach, but fell short of considering the feasibility given the complexity of the proposed designs and implementation mechanisms.** Design emphasized integrated watershed planning, the need for solid economic analysis of opportunities and market linkages, innovative implementation arrangements, and collaboration across agencies. Design also underscored the potential benefits of extensive capacity development for communities and service providers, such as producer organizations. All of these were highly relevant themes and activities based on lessons learned from past IFAD projects in The Gambia. The PDR pointed to the need to phase project components well, build on participatory pilots, and link watershed development and commercialization. Targeting, gender, innovation and sustainability issues and opportunities were well described. Nema design was coherent and complementary, including two international co-financiers and contributions from various ministries and agencies.
 34. However, in retrospect and, in an environment that was politically, economically and institutionally fragile, and where many previous projects with similar infrastructure development had yielded mixed results at best, the project was too ambitious. Some technical designs were overly prescriptive and restrictive, such as those of vegetable gardens, while others left too much flexibility and thus uncertainty under the Gambian circumstances. This was especially the case for infrastructure design, technology choice and intervention sites for enhanced rice productivity.

¹⁴ See list of policies and related documents in chapter 2.

35. The readiness, capacity and willingness of the Government, the PSU and service providers to implement the project as designed was underestimated. This later became obvious in missed opportunities in adopting a coherent watershed approach, effectively integrating NRM and climate change with Nema's agriculture activities, and significant problems with flawed infrastructure design. For market institutions, relevance was high but interventions came late. Investments in mangrove restitution overlapped with those of other similar projects, and did not adequately consider complementary mitigation activities to prevent continued cutting-down of future mangroves as fuel for fish-smoking.
36. Innovative implementation arrangements were not fully relevant for the task at hand. PSU operations were too centralized and the large number of performance-based service providers was difficult to manage, which ultimately led to disjointed implementation. Details for poverty targeting were lacking, and the PSU made no efforts to come up with a poverty-targeting strategy when requested. In sum, Nema design was good on paper, but not sufficiently adapted to Gambian circumstances. Very few mechanisms were built into the design to trigger timely adjustments or external implementation assistance, as later suggested by the MTR for rice engineering.
37. **Nema had a clear internal logic of outputs and pathways to reach its broader objectives, through two interlinked components of watershed development and commercialization.** The PDR proffered an in-depth problem analysis and rationale to justify the project, including a logical framework matrix of seven outcomes and detailed indicators and quantitative targets, which included component 3 of project facilitation (IFAD 2021b, 9 ff; para.131). These were by and large maintained until completion, except for some output quantities that were modified at midterm (IFAD 2021b, ix-x). Since Nema did not develop an explicit ToC, the PPE Team reconstructed one for this evaluation (annex V, figure 3).
38. **The Chosso added-value to Nema was limited and its implementation was largely disconnected from the main project.** NRM, CCA and resilience were mainstreamed and relevant priorities of the project since its inception in 2012. The Chosso ASAP grant (effective in late 2015) added resources for mainstreaming CCA into watershed-infrastructure development and promoting climate-smart agricultural practices of water management, soil fertility (compost chambers), mangrove restoration and woodlot restitution. Although Chosso design was coherent with Nema design, and a dedicated Chosso PSU member was added to the Nema team, its implementation never managed to effectively link up with other Nema activities. This was partly since it came late, and partly since it was mostly executed by another ministry, the Ministry of Environment, Climate Change and Natural Resources.
39. **Different infrastructure types were regarded by the PDR as highly relevant and likely to be sustainable, if such investments were market oriented, economically profitable and planned within a participatory watershed-management approach, especially those for rice.** About 70 per cent of project resources went into various types of rice, vegetable garden, NRM and market-infrastructure development.¹⁵ The PDR offered many relevant technical details for each of these infrastructure types, although without reference to specific design or feasibility studies that were instead to be decided and carried out during implementation. Detailed financial and economic analyses showed satisfactory returns, but these depended on reasonable investment costs for rice (e.g. thresholds

¹⁵ This covered (i) water control and access structures for traditional rice production, carried out mainly by women farmers; (ii) higher productivity, double-cropped tidal irrigated schemes, often involving all household members; as a particular priority for the Gambian Government; (iii) the rehabilitation and new construction of women's and youth' vegetable gardens with the capacity to produce year-round high-value vegetables for the market; (iv) infrastructure for uplands water control to reduce soil erosion, store and retain water and the incidence of village flash flooding; and (v) tertiary access market roads and processing and market facilities.

for tidal irrigated rice were set at US\$6,250 per hectare) and effective market access, especially for vegetable production (IFAD 2015a, para. 16).¹⁶

40. Complementary activities for enhanced supply of agricultural inputs, extension, and institutional support and finance of market access were adequately included in the design (IFAD 2021b, xv) In addition, the commercialization component covered the need to support producer organizations and thereby help women and youth with market access and through an innovative Capital Investment Stimulation Fund (CISF). At the same time, the PDR recognized the limited availability and capacities of such organizations in The Gambia, but saw an opportunity for Nema capacity development in this area (IFAD 2021b, 90). CISF design, as the sole financial support in Nema, was not strongly targeted; it thus lacked relevance for IFAD's main target groups.
41. **The Nema PDR also proposed detailed arrangements for community and beneficiary participation in infrastructure planning, operations and maintenance (O&M), embedded in a broader watershed-development approach (IFAD 2021b, para. 45-51).** The PDR went to lengths to argue for, and describe, the participative (mini)watershed-planning processes that were seen as necessary to address the serious problems with natural resource and climate issues, learning from previous IFAD projects in The Gambia (annex VII, box 4). The approach would also emphasize infrastructure ownership by communities, water-user groups and other local organizations, and related capacity development. The completion of the communal watershed-planning process was seen as an absolute precondition, especially for tidal irrigation. While the approach was certainly appropriate from a technical and environmental standpoint, its operationalization in the Gambian context, and the required human resources, advocacy and other support, did not receive sufficient attention in design.
42. **The Nema targeting strategy was relevant for reaching its main target group of women, less so for youth.** The primary target group of the project were poor rural smallholders, predominantly women and youth. The targeting strategy relied mainly on the choice of crops (vegetables and rice), which indeed favoured women and youth, on the type of infrastructure/technology supported – such as women's traditional lowland rice production – and on support for existing women's and youth groups that IFAD projects had already worked with before. Project target groups also included pre- and post-production value adders and operators, such as young rural entrepreneurs with interests and skills in rural service provision. While the project adopted a geographic vulnerability-targeting criteria, the extent to which this approach successfully reached the most vulnerable members of the community is not clear – given that the project did not develop a monitoring strategy of how effective Nema was in targeting, as suggested by the PDR (IFAD 2021b, annex 2, para. 26). The main reasons given by project representatives for lack of proactive targeting of project sites, groups and individuals were that Nema was largely community- and group-demand driven, the project worked mostly with already established and well-known groups, communities and beneficiaries, and that rural areas were generally regarded as poor.
43. **Adjustments to project design during implementation enhanced relevance.** As mentioned earlier, the ASAP Chosso grant, added to Nema in 2015, further underscored the project's relevance; but not to the extent that could have been possible at an earlier stage and with more effective joint implementation. Other adjustments resulted from the relatively late Nema MTR in 2018, five years after the project started and a bit more than one year before completion. The MTR was a watershed moment for the project, with a blunt assessment of achievements and lingering problems. A trend analysis that compares several supervision ratings with those of the 2018 MTR underscore this point – critical performance indicators scored

¹⁶ Although neither drip irrigation nor cold storage were planned for.

lower in the MTR than in regular supervisions (effectiveness, agricultural productivity, human and social capital and empowerment, quality of project management, and M&E, annex VII, figure 6). The MTR led to a refocused and concentrated approach on what was feasible to accomplish until project completion by end 2019.¹⁷

44. Focusing on subcomponents that had done less well, the MTR suggested turning full attention on completing ongoing infrastructure work rather than starting with new infrastructure construction. The MTR also led to a reduction of output targets, such as for tidal irrigation and Chosso-financed lowlands infrastructure, a higher Nema share in matching grants (going up from 45 to 60 per cent), more focus on the soft aspects of developing market business and demand linkages rather than building hard market infrastructure, and more capacity development of service providers. Some technical changes were made to the original designs of vegetable gardens, primarily to emphasize and mainstream nutrition. The Gambian exclusivity clause for construction contractors was lifted, but the project never followed up on employing foreign infrastructure equipment companies as suggested by the MTR.
45. **Summary – relevance.** Nema was well aligned with Government and IFAD policies and priorities, and contained innovative and timely concepts such as watershed approach, market-demand orientation and performance-based service providers. The project was based on solid analysis and scaled-up IFAD country experiences and models. Its design remains relevant for today’s national and global development, transformation and resilience agenda. But key elements of Nema design turned out to be unrealistic and not well adapted to a country with fragile situations and institutional weaknesses; these were hard to overcome with capacity development alone. Poverty-targeting lacked specificity on how the most vulnerable groups were to be reached. The project’s integrative requirements and complex implementation arrangements caused problems in execution and were not sufficiently decentralized. The relevance of Nema is rated **moderately satisfactory (4)**.

Effectiveness

46. Effectiveness assesses the extent to which the project-development objectives were achieved, taking into account their relative importance.¹⁸ This chapter will establish the achievement of targets, analysing which project parts have been more effective and why, while taking account of adequacy and quality of infrastructure construction.¹⁹
 - (i) **Achievement of objectives by component**
47. Objectives for component 1 (watershed development) were increased productivity of rice and vegetable production of women and youth – mainly through infrastructure development – and enhanced climate change adaptation in the context of community-managed watersheds. For component 2 (commercialization), objectives consisted of better market access and linkages, enhanced rural business services, and stronger capacities of POs and FOs for rice and vegetable marketing, with an emphasis on engaging youth and to a lesser extent women (annex V, figure 3, Theory of Change). Component objectives (intermediate outcomes) contributed to the overall project-development objective of increasing incomes through improved productivity, based on sustainable land- and water-management practices and market access; the ultimate goal was to reduce the poverty of rural women and youth, without excluding men (chapter II.B). The ToC shows not only a clear hierarchy of objectives but also the interlinkages between the two components, which were critical to achieving long-term outcome objectives as well as relevant assumptions and risks in getting there.

¹⁷ The completion date was later extended to June 2020.

¹⁸ See: IOE Definition annex II.

¹⁹ See: Evaluation Framework annex VI.

Component 1: Watershed development

48. **There was mixed performance in achieving development objectives in the principal component of watershed development.** The PPE field mission key informants, and many of the project documents and anecdotal evidence, showed very much the same. A number of Nema-project sites were truly benefiting from certain Nema interventions, while others suffered from poorly designed and constructed infrastructure, lack of coordinated and complementary services and investments, and weak capacity development. Capabilities and commitment by infrastructure contractors, availability of well-established community structures, organizations and groups, and continuity and follow-up on previous projects were important factors for local success and failures in the watershed-development component. Political instability – causing among other issues the temporary suspension of the Nema project director – and the political impasse of the December 2016 presidential election affected and disrupted project implementation.
49. Eventually, three out of six output targets for component 1 were achieved (or even over-achieved): (i) improved water management and access to women’s traditional lowland rice fields; (ii) erosion-control infrastructure in upland farms; and (iii) restituted and developed mangroves, woodlots and agroforestry (table 4). But only 55 per cent of the planned acreage of tidal-irrigated land development and rehabilitation was reached, and the same low percentage of vegetable gardens were put in place, 55 per cent, or 33 gardens compared with 60 planned, with 7 more incomplete (IFAD 2021b)²⁰ It also should be noted that several output targets were reduced or dropped during the MTR, partly as co-finance by AfDB and IsDB did not materialize, and partly since costs were higher than expected (more details by indicator are provided in annex VII, table 6).

Table 4

Nema watershed component: Achievement of physical outputs (December 2019)

Subcomponents	Indicators	Achieved (per cent)
Tidal irrigation rice	Land developed and rehabilitated	55
Traditional lowland rice with improved water control and access	Area benefiting from infrastructure improvements	102
Enhanced vegetable gardens	Number of gardens rehabilitated and newly constructed	55
NRM and CCA (as part of watershed planning)	Area of mangroves, woodlots and agroforestry developed and restituted	140
Water control in upland farms	Upland cropping area with erosion control	154
Extension through farmer field schools	Farmers benefiting from better knowledge on agricultural and climate-smart practices	78

Source: PCR Appendix 10.

Subcomponent 1.1: Improved sustainable lowland productivity, particularly for women

50. **There was limited evidence of improvements in lowland rice productivity.** Apart from beneficiary feedback and confirmation of variable watershed-development performance through key informants, it was impossible for the PPE to establish the extent to which Nema outputs and other activities contributed to the key objective of productivity and production growth, since no reliable M&E data was collected on utilization and productivity gains of rice infrastructure and adoption of improved agricultural and climate-smart practices and technologies.
51. Of nine visited rice schemes (six traditional lowland rice and three tidal-irrigated sites), only a single site (one with tidal irrigation) was working fully satisfactorily.

²⁰ The PCR (para. 226) notes that 7 gardens (or 35 ha) have not been fully completed, but it is not clear whether these are part of the 165 ha of vegetable gardens having been established (55 per cent of targets), or are additional ones.

Three traditional lowland sites were at least partly functional and had some improved features. Other sites had incomplete construction (two tidal sites were left unfinished by contractors) or had been abandoned by villagers for different reasons, including poor quality of infrastructure and low profitability. Beneficiaries pointed to weak community consultations during construction, community advice often being ignored by contractors, and Nema PSU not always being responsive to their needs and concerns (see annex VII, table 8 for more details on field-visit observations).

52. **Much of the infrastructure design and construction for improved rice schemes, both tidal-irrigated and traditional swamp rice, were not satisfactory.** Challenges for rice-production infrastructure included the limited availability and capacities of private sector companies in land development, the short dry season for land-development works, and contractors' equipment breaking down. Roles and responsibilities of design teams, supervising engineers and construction companies were not well defined, and design and construction were not well linked. Design was often inadequate for the location, with vague technical specifications leading to bids by construction companies that were insufficient for the work required. Almost all construction of infrastructure for rice was completed in 2018 and 2019, more than five years after the project started. This further affected outcomes and impact. In general, infrastructure works for upland water control were easier than lowland infrastructure, as they required less complex design and fewer consultations. Roads, however, could have benefited from more attention to technical issues such as compaction and road drainage, and linkages with the National Road Authority (IFAD 2019a).²¹
53. **The absence of specialized irrigation and rural infrastructure engineering expertise within the PSU, and of a Government rice sector strategy, affected quality of work and infrastructure sustainability.** The PSU did not recruit technical assistance as recommended by the MTR. The project relied mainly on contracted engineering companies and consultants to design, review and supervise the infrastructure works under this component. The Soil and Water Management Services of the Department of Agriculture was only marginally involved, unlike in the previous IFAD project (PIWAMP), although it is mandated to plan and supervise lowland rice development.²² Nema commissioned the development of a national rice strategy in 2014, but this was never formally reviewed and adopted by the Ministry. The Soil and Water Management Services director was not aware of its existence during the PPE interview. The draft rice strategy was strong in objectives (national rice self-sufficiency within a few years) and in describing the different rice ecologies and settings, but weak in drawing realistic and financially, socially and ecologically viable conclusions on strategic opportunities and risks for different forms and technologies of rice production in The Gambia.
54. Deficiencies in national technical capacity for irrigation have also been pointed out, by both the Nema PCR review meeting and a recent AfDB evaluation.²³ Weaknesses in rice-infrastructure delivery were even worse in the two AfDB and IsDB projects which were considered co-finance for Nema during design, and which were implemented in parallel by the same PSU as Nema.²⁴ As of late 2021, lowland rice infrastructure in the IsDB project was only completed at a rate of less than 30 per cent.

²¹ The field team found Nema financed market access roads in three villages, two of them considered of poor quality by the villagers, with a third one receiving positive feedback.

²² They were contracted to design water harvesting infrastructure for lowlands under Chosso. This infrastructure was, however, never developed.

²³ The recently completed AfDB FASDEP project in The Gambia supported lowland rice development and observed that most of the government institutions used by the project did not have the requisite expertise, logistics and budgets to accomplish the task (IFAD 2021b).

²⁴ For AfDB this was the Program building resilience against food and nutritional insecurity in the Sahel (P2RS), a multi-country regional programme, with a country project in The Gambia.

Subcomponent 1.2: Improved vegetable yields for women and youth

55. In terms of infrastructure quality, utilization and achievement of productivity and other objectives of Nema infrastructure, the PPE focus groups with beneficiaries and field staff showed good results for Nema vegetable gardens (see annex VII, table 8 for more details from field visits).
56. **Infrastructure design and construction challenges were much less in Nema vegetable gardens.** This was particularly the case since the gardens followed a standard design with clear specifications for materials. This led to good-quality materials being used, such as for fencing. Still, informed observers noted that many gardens had their own problems with operational performance of water infrastructure, boreholes and piping. Most gardens managed to take care of these problems themselves. For some gardens, such as those newly established, more sensitization would have been needed to attain beneficiary ownership for taking care of maintenance (rather than to regard this as a project responsibility).
57. Standard design also meant that, in some cases, the vegetable gardens were not sufficiently site-specific and did not address the challenges of each site well, nor the specific needs of the beneficiaries (MTR). The standard garden technology choice did not include drip irrigation, cold storage or transportation funds, which were considered by experts as the critical missing link in achieving a stronger market linkage for beneficiaries. After some additional studies, it is now planned to introduce these and other features in the ROOTS project.

Subcomponent 1.3: Watersheds sustainably managed by communities and climate resilience

58. **CCA/NRM outcomes were only partly satisfactory due to the late start of the Chosso grant, its quality of implementation, cancellation of most Chosso-planned lowland activities, and different locations of Chosso and Nema interventions.** Nema-Chosso reached its nominal output targets on resource restoration, such as of community-managed agroforestry, building fences for woodlots and participative mangrove restoration. But beneficiaries regarded service providers as weak in community development and ineffective in enforcing forest/woodlot protection. Villagers in a mangrove-restoration site were unsure about Nema activities, as other agencies worked in the same place. Nema and Chosso intervention sites were not well linked through a watershed approach. Other activities were carried out relatively effectively; these included awareness campaigns, updates of manuals, and farmer field schools for more than 15,000 farmers, women's groups and youth, to enhance agricultural practices and climate resilience. Climate games generated climate awareness (chapter III.B Climate Change Adaptation). However, farmers' actual adoption of climate-resilient practices, and their effects, were never recorded.
59. Nema infrastructure for upland erosion control managed to protect an area of 4,630 ha. Vegetable-garden schemes promoted compost chambers for production and access to organic fertilizer, and maintenance of soil fertility. At the national level, the Chosso grant supported the Government and the United Nations Framework Convention on Climate Change (UNFCCC) focal point in reviving the National Climate Change Committee, and institutionalizing and mainstreaming climate change in policies and strategies. Other Chosso-planned activities were cancelled or postponed for the ROOTS project. Chosso started some community debates on integrated watershed management but plans were never finalized and implemented (chapter III.B Environment and Natural Resource Management). Water-harvesting infrastructures were designed as an alternative to lowland irrigation but not executed due to a halt of new constructions after the MTR. Chosso came late to influence climate-smart infrastructure design in Nema, which would have had to be done at an early design stage.

Component 2: Agriculture commercialization

60. **There were some tangible achievements for agricultural commercialization, but with fewer linkages to private sector market demand, Nema production activities and targeting, than envisaged at design.** Many of the component's activities came at a late stage, except for the provision of two-dozen matching grants, the construction of market-access roads and some market outlets. But at project completion, three of four component output targets were indeed reached: (i) producer organizations and farmers using the market information system (MIS) and becoming more involved in group sales; (ii) the number of youth starting businesses; and (iii) farm-to-market access roads (table 5). A fourth indicator was below target (at 82 per cent): the support of small enterprises and farmer organizations with matching grants and business development services. To what extent these achievements actually affected lasting enhancements of rural business provision, market sales and farmer prices for agricultural and horticultural products, as well as higher incomes for producers and new businesses, is uncertain.

Table 5

Nema commercialization component: achievement of physical outputs (December 2019)

Subcomponents	Indicators	Achieved (per cent)
Improved rice and vegetable marketing	Producer organizations using MIS and involved in group sales	124
Youth inclusion in business development	Youth starting businesses	100
Agriculture enterprises supported	Small enterprises and FO supported with matching grants and business-development services	82
Farm-to-market access roads	Length of enhanced feeder roads	134

Source: IFAD, 2021b appendix 10.

Subcomponent 2.1: Stronger capacity of POs and FOs for commercialization of rice and vegetables.

61. Nema invested significantly in capacity development of POs and farmer groups for better marketing, including through the establishment of agricultural value chain interaction platforms (AVIP) for help with sales and linkages to market demand. Many of these platforms were reportedly working well, as also confirmed during the PPE field mission, particularly when AVIP targeted existing groups linked to successful production sites. Some considerable financial success stories were reported for women's vegetable gardens, along with demonstrably increased sales through POs/FOs. POs/FOs also helped farmers gain better access to seeds and fertilizer, through the national agency for fertilizer distribution. But the focus on established groups also led to poor Nema targeting of beneficiaries in more marginal areas of the country.
62. The National Coordinating Organisation of Farmer Associations of The Gambia was instrumental in mobilizing its member groups for PO/FO support and farmer and women mobilization for market access. Altogether, the project formed and strengthened 24 producer organizations (6 rice POs, 6 vegetable POs and 12 AVIP), which were all operational at Nema completion, albeit less so after Nema closure. It is planned to consolidate and upscale work with POs, FOs and AVIPs under the ROOTS project.

Subcomponent 2.2: Agriculture enterprises and businesses are supported or created

63. **Matching grants introduced by Nema under the Capital Investment Stimulation Fund were a new and innovative concept for The Gambia, but with limited success for targeted outreach.** The grants were not sufficiently oriented towards market businesses and IFAD target groups. In addition, they were only partly linked with Nema's infrastructure development and other services, and

the total number of delivered grants was relatively small (40 grants). About 100+ matching grants were approved under the CISF, but more than half of applicants were not able to fulfil all conditions such as down payments and business plans. Only 40 grants were awarded in total, initially under a 45:45:10 formula (for project matching grant, finance through banks or suppliers, and beneficiary down payment, respectively). After midterm, the project-matching grant share was increased from 45 to 60 per cent, and the finance requirement reduced to 30 per cent to stimulate demand and interest among the IFAD target groups – but unsuccessfully. This leads to some lessons for future matching grants and for reducing elite capture (box 1).

Box 1

Targeting of matching grants in Nema

Many women and youth had problems coming up with sufficient collateral (10 per cent) for matching grants in Nema, since financed equipment such as a cereal mill or a tractor were not seen as valid collateral by most financing institutions. After the MTR, Nema increasingly tried to facilitate grants for Nema target groups, mainly youth. A low level of understanding of business principles, and how to operate a business, was found among these youth. Training on business development was reinforced and they were assisted with writing up business plans, with moderate success. Eventually, youth groups obtained 11 matching grants, all for cereal milling and threshing and mostly in the central and upper regions of the country. The Gambia Global Youth Innovation Network supported much of the identification and training of rural youth and groups, but with many teething problems, from the limited pool of qualified rural youth to inexperience with administrative and financial processes.

Out of 27 CISF grants for individuals, only four went to women. However, women were also part of the 13 groups and enterprises that obtained matching grants. A considerable number of grants went to enterprises in the vicinity of the capital area, mostly for vegetable production – some of them for above-mentioned processors that were linked to POs/FOs. In terms of their use, out of 40 grants, 11 were for tractors, 10 for vegetable irrigation and power tillers, and most of the remainder for cereal processing. One grant was for a refrigerated truck. A lesson learned from the matching grant pilot in The Gambia was that future projects should have conditions that are more targeted to different purposes and capacities of specific beneficiary categories, with different beneficiary co-payments, conditionalities and grant ceilings. Learning from Nema, the ROOTS project planned to have three different matching grant windows. One is for post-harvest support for farmers and farmer groups, with a 20 per cent contribution by farmers; a second window is for private sector/small and medium-sized enterprise support, with higher contributions and conditioned on demonstrating social benefits for smallholders; and a third window is intended specifically for climate-smart technologies such as drip irrigation.

Source: PPE key informant interviews and document review.

Subcomponent 2.3: Improved market-demand linkages

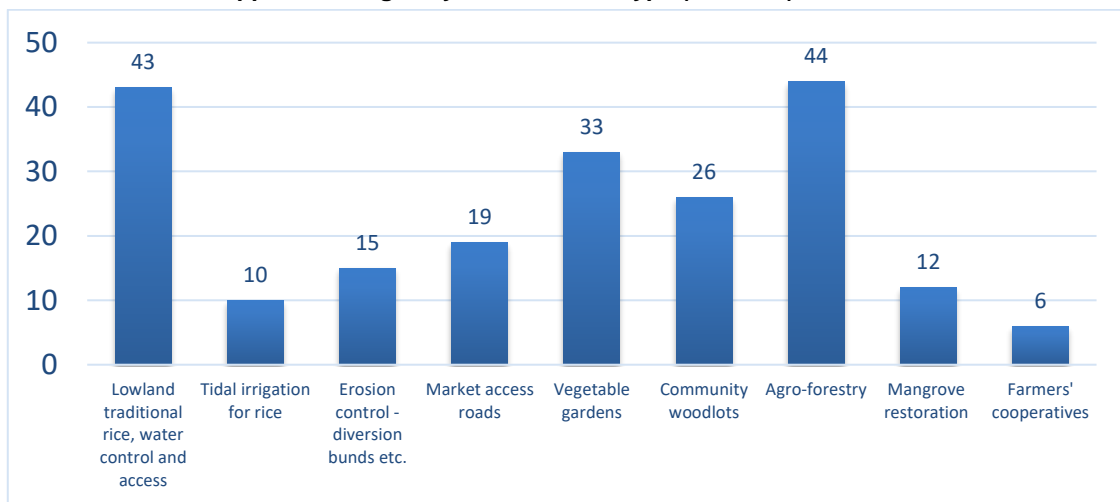
64. **Nema piloted a Market Information System and direct market linkages between producers and private enterprises.** The MIS for national and local vegetable and rice prices is working fairly well and appreciated by farmers. The system is still facing some data collection, data management and dissemination problems, including unstable internet connections. Support for MIS will be picked up by the ROOTS project. Nema also promoted some linkages between producers and private off-takers for rice, chili peppers (chick farm, heritage enterprises) and cassava processing. Several of these off-takers were supported through the CISF matching grants. Contract farming was piloted in at least one garden scheme, but not successfully completed. Most institutional activities under the commercialization component were still in their pilot phase during Nema. This limited their effects on Nema production, productivity and other objectives. Lasting achievements will depend on continued support and adaptation, which is expected under the ROOTS project.

(ii) **Effectiveness of targeting**

65. Overall, Nema’s **targeting strategy** achieved its goal of reaching its main target group of women (80 per cent) and to a lesser extent youth, but it missed out on targeting the most vulnerable. The project was demand-driven and the PSU did not consider it necessary to have a targeting strategy for Gambia’s rural areas, which are broadly considered as poor. No attempt was made by the project to report on the poverty status of households and beneficiaries reached. The Nema project over-achieved its beneficiary targets by 156 per cent, with most households, and in particular women, benefiting from investments in traditional lowland rice production, vegetable gardens and food security and climate resilience.
66. **Project coverage.** With its interventions in the two components, Nema reached at least 161 villages across The Gambia, but much fewer covered at least two or more Nema investments. Most villages were reached through improved traditional lowland rice production, vegetable gardens and agroforestry/community woodlots – more than 30 for each of these categories (figure 1). Other activities were more concentrated on about 10 to 20 villages, such as market-access roads, erosion control, mangrove restoration and tidal irrigation. Only 35 out of 161 villages had two or more types of major infrastructure and market-access activities.²⁵ This lack of critical mass of investments in many villages was also found in the IOE 2004 evaluation. It should also be noted that, in addition, Nema helped to provide various extension, input supply and institutional capacity-development services, for which no aggregate information on village coverage was available.

Figure 1

Number of Nema-supported villages by infrastructure type (total 161)



Source: Nema PSU data (IFAD 2019b).

67. **Project outreach.** The largest number of beneficiaries in Nema were reached through activities to enhance climate resilience and NRM, followed by those participating in traditional lowland rice production and vegetable gardens. According to the PCR, 45,968 households directly benefited from various Nema activities, with an estimated number of 413,712 household members. Fifty-one per cent of these were women and 33.5 per cent youth of less than 30 years. Close to 92,000 persons directly received some form of project services.²⁶ A total of 26,600 households benefited from activities enhancing their resilience and climate change adaptation, through better extension and investments in natural-resource protection (mangroves, agroforestry, woodlots). Others benefited from improved traditional lowland rice production (12,733), vegetable schemes (6,600) and erosion control for

²⁵ Of these 35 villages only eight had more than two activities: 4 villages had three and 4 villages had 4 activities.

²⁶ The field monitoring data and the information received from the various service providers sometimes referred to the same beneficiaries or households. The PSU consolidated these data to avoid double-counting of beneficiaries.

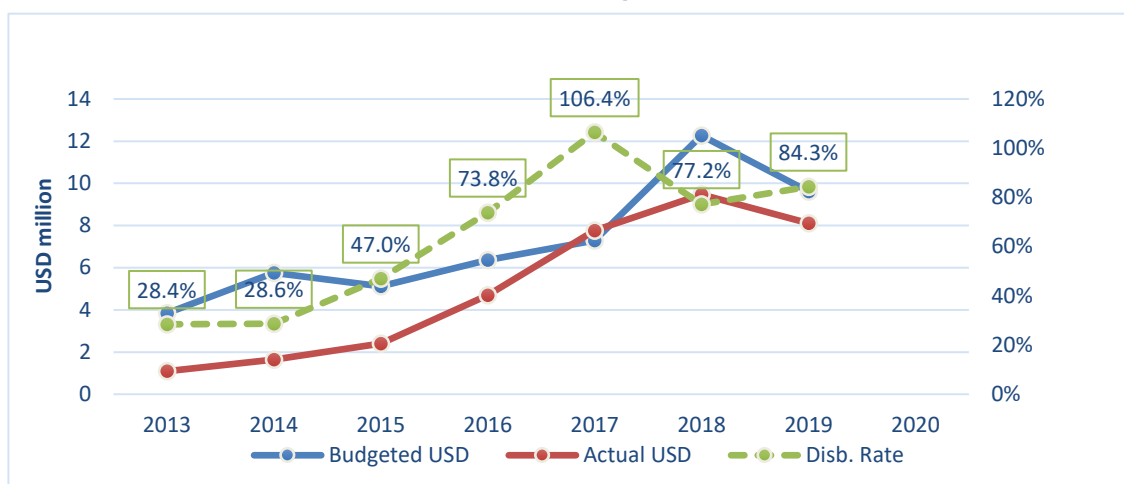
upland crop producers (4,630). The substantial amount of investments in tidal irrigation only reached 432 households. Overall, Nema achieved 156 per cent of its overall targets in terms of beneficiary numbers.

68. Women and youth benefited directly and indirectly from Nema support, mainly through targeting traditional women's crops such as rice and vegetables, and direct capacity and empowerment development. These included production and business capacities, infrastructure maintenance and literacy. The PCR estimated that at least 27,000 women directly benefited from Nema, with more benefiting indirectly. The latter included enhanced climate-resilient upland crop production (which is dominated by men) and general improvements in market access. A few hundred rural youth, females and males under 30 were reached directly with capacity development and business opportunities, even though these activities did not fulfil the high project-income expectations. In addition, a number of vegetable gardens were specifically established for youth groups and fully managed by them.
69. **Summary – effectiveness.** While Nema reached a number of its physical output targets, several important ones were not achieved or, if they were, it occurred late in the project. Critical rice infrastructure was not well designed and constructed, particularly tidal irrigation. Lack of complementary, coordinated and well-phased interventions at project sites limited the potential achievement of objectives. Moreover, the extent to which project objectives of increased productivity and market access were achieved is not known, as relevant data has not been collected. Late delivery of much of the commercialization component, and the pilot nature of its implementation, limited the project's market-orientation. Climate change adaptation and NRM activities were only partly satisfactory; they came late while some were cancelled. Also, they were not well integrated with other Nema activities in a watershed-integrated approach. Although Nema's outreach targets were over-achieved in terms of the number of beneficiaries, there is no information on any demonstrated synergies across the various activities, particularly those for NRM/CCA and infrastructure development. Similarly, synergies were missing in coverage of villages. On balance, overall effectiveness is rated **moderately unsatisfactory (3)**.

Efficiency

70. Efficiency is a measure of how economically resources and inputs (such as funds, expertise and time) are converted into results. Here, efficiency is examined in relation to the following aspects: (i) timeliness; (ii) disbursement performance; (iii) programme management; (iv) cost per unit and beneficiary; and (v) economic and financial impacts.
71. **The project became effective immediately after approval and disbursed two months later.** The project was approved on 10 December 2012 and became effective on 20 December 2012, i.e. it took less than 10 days from approval to effectiveness. The first disbursement followed on 25 February 2013, two months later. This underscored the preparedness of the project and the quality of its design. Nema was conceived for a period of seven years from entry into force, which was extended for six months until 30 June 2020, partly due to late completion of infrastructure work.
72. **Disbursements were slow in early years due to significant delays in contract procurement for critical infrastructure works.** Most initial disbursements were for planning and project set-up activities. The gap between the annual workplan and budget (AWPB) planned and actual expenditures remained high until 2016, with AWPB disbursement rates between 28 and 74 per cent only (figure 2), and correlated low supervision ratings of *moderately unsatisfactory* for 2015-2017 missions. AWPB financial execution improved eventually over the years, to between 77 per cent and 106 per cent from 2017 to 2019.

Figure 2
AWPB disbursement rates 2013-2019 (Nema, including Chosso)



Source: Nema Annual Reports 2013–2019.

73. **The PSU was stable and performed relatively well, considering the fragile political environment, but there were gaps in staffing, capacity of decentralized management and M&E.** There was no major staff turnover and the PSU was headed by a competent director with technical background in water engineering. But the team did not have a dedicated inclusion or gender officer; the function was rather taken on by the business development officer. Nor was there an infrastructure and/or irrigation officer, which turned out as a major handicap. The largely centralized structure of the project, with the PSU based in the capital at one end of the country, was not effective for integrating and supervising the various Nema work streams in the communities spread across the country.²⁷ Government regional execution structures were supportive but their capacities insufficient. The PSU performed well on project-progress reporting and external communication. However, there was no internal, results-based management system for effective quality control of Nema's numerous service providers, or for timely measurements and aggregation of project outputs and outcomes for adaptive management. Contract follow-up and output monitoring improved after the MTR.
74. **Costs for project management were unacceptably high at 17 per cent of the total, 3.6 per cent points higher than planned, and 3 per cent above IFAD-wide targets of less than 14 per cent.** The MTR drew attention to Nema's high and above-budget recurrent and operating costs with limited effects. But in the end, Nema management costs still compared favourably with those of the previous PIWAMP project, which reached 32 per cent of total project costs, with over-runs of 300 per cent (albeit at much lower total project costs).
75. **It was not possible for the PPE to validate unit costs of most infrastructure-construction types in Nema, except for vegetable gardens, since actual project expenditures could not be tracked.**²⁸ The project was only able to provide information on the unit costs of Nema vegetable gardens (of about US\$30,000 per hectare),²⁹ which were slightly higher than those recorded for parallel World Bank and AfDB projects in The Gambia (of US\$23,161 and US\$27,100) (World Bank 2020). For rice infrastructure, the project could not make actual expenditure data available in a sufficiently granular way to relate such costs to infrastructure

²⁷ With distances to be covered of up to 6-8 hours of driving to the other end of the country, even if The Gambia is relatively small.

²⁸ During the IOE CPE 2016 no evidence-based efficiency analysis could be performed since cost data were only available for a handful of infrastructures.

²⁹ At 2020 exchange rates, and US\$40,000 at 2018 exchange rates.

outputs produced, i.e. at a minimum by subcomponent.³⁰ Costs per beneficiary were found to be lower at completion compared to design, since the number of beneficiaries was higher than planned: US\$883 per household (or US\$98 per household member) compared with US\$1,491 (US\$166 per household member) at appraisal. Ideally, these costs would have to be analysed with actual benefits gained by these beneficiary households. Such figures are not available for Nema.

76. **The economic and financial analysis at completion does not provide a conclusive indication on the actual returns of the project.** The Nema project undertook a very appropriate, thorough and well documented economic and financial analysis at design, which was re-done at completion. The re-estimated economic internal rate of return of 19 per cent, with a net present value of US\$52,338,686.80, was slightly lower than the economic internal rate of return of 21.8 per cent with a net present value of US\$54,192,090 realized at appraisal. The PCR attributed this to the delayed completion of infrastructure for both tidal and vegetable schemes, which inhibited their optimal operationalization. The PPE considers this ex-post analysis to be far too positive, as the rates of both economic and financial return at completion were largely calculated on assumptions of investment costs, areas to be developed for improved rice and vegetable production, cropping intensity, and yields and market access. None of these could be validated by the PPE, but a number of them appear to be unrealistic, including the quantity of infrastructure developed, its quality, productivity, and technical and organizational sustainability, as pointed out in other parts of the report.
77. **Summary – efficiency.** Notwithstanding a timely start and a stable PSU team, Nema operational efficiency was low due to late delivery of critical production infrastructure and weaknesses in commercialisation support. Project management was mixed, with problems in decentralized, community-based delivery and M&E. Economic and financial returns for much of Nema’s infrastructure investments are uncertain, due to major issues with quality and farmers’ adoption of important investments, particularly in rice production. On balance, overall efficiency is rated **moderately unsatisfactory (3)**.

Rural poverty impact

78. Rural poverty impact defines the changes that have occurred, or are expected to occur, in the lives of the rural poor (whether positive or negative, direct or indirect, intended or unintended) because of development interventions. The impact domains considered for this PPE are clustered as follows: (i) agricultural productivity; (ii) food and nutrition security; (iii) household income and assets; (iv) human and social capital and empowerment; and (v) institutions and policies.
79. Key sources of information for this section include both secondary and primary sources of data. Secondary data sources include the PCR, MTR and the baseline and endline surveys conducted in June 2014 and August 2019 respectively. Primary data collection comprised focus-group discussions with beneficiaries and key informant interviews with project stakeholders. A comprehensive assessment of rural poverty impact evaluation for the Nema project is challenged by the lack of a counterfactual: a design-based (treatment versus control) approach was not considered in the implementation of the baseline and endline surveys, meaning the impact is assessed a model-based approach. This consists of a “before-and-after” design based on a dose-response (or continuous-response-variable) model. Even with the dose-

³⁰ For Nema rice infrastructure the MTR reported that the unit costs for dykes, bridges, and spillways, as well as upland water control infrastructure, had been “grossly understated” and were considerably higher than planned but it does not provide actual figures. The World Bank GCAV PCR presented the investment costs per hectare for tidal irrigated rice in three projects as US\$5,250 for Nema, US\$7,500 for FASDEP (AfDB) and US\$2,411 for GCAV (World Bank). According to the report, the large differences are caused by the WB project investing exclusively in rehabilitating existing schemes, while Nema and FASDEP were concentrating more on new schemes or such with strong re-design requirements. Since it is not clear whether these figures represent actual or planning figures for the case of Nema, the PPE does not wish to draw any conclusions on this basis.

response approach, there is lack of clear reference to specific contributions to the impact claims achieved through Nema interventions, in the endline survey report.

Agricultural productivity

80. Project data were insufficient to justify claims of gains in agricultural productivity. The reports of increased productivity (for both rice and horticulture) cannot be fully verified for the Nema project in the absence of solid productivity data from baseline and endline analyses. The PCR highlights increased productivity for swamp rice from 0.7t/ha to 2.5t/ha and for tidal from 1.5t/ha to 3.5t/ha. However, no data sources were referenced and attempts to identify the sources of information during the PPE were not successful. For some sites, evidence from the focus-group discussion with communities even suggested reduced rice productivity due to technical design errors; these resulted in flooding of rice fields in communities, in villages including Boiram, Wellingara, Tenengfara and Kolleykunda. Evidence of rice-productivity increases were found in Barajally Suba and Kudang villages.³¹
81. Additionally, the agricultural productivity data proffered in various project reports, including the PCR, often refers to planning figures and extrapolated figures from agricultural trials, but not actual production data collected from beneficiaries in a systematic way. The annual national agricultural data collection by the Department of Planning does not collect information on vegetables. Its rice-production data is not sufficiently granular and reliable to provide evidence of Nema achievements, although the project covers more than a third of the area of lowland rice in the country.³²
82. **Qualitative evidence suggests that the vegetable gardens may have contributed to increased horticultural productivity and been highly profitable for the beneficiaries.** There are indications of potential increases in vegetable production, where the vegetable gardens infrastructure was fully functioning, with substantial increases in the diversity of vegetables being grown. Successful schemes usually had mixed-gender management committees, with bank accounts and regular fees collected from members and occasional sales from the common compost pits for maintaining the facilities. An evaluation conducted by United Purpose provided quantitative evidence of vegetable-production increases. However, there were gaps in the measurement methods.³³

Food security and nutrition

83. Changes in food security relate to availability, affordability and stability of access to food, whereas nutrition relates to the nutritional value of food and child malnutrition. The evidence from the baseline and endline surveys indicates positive changes in the food and nutrition security impacts of the project in the targeted communities.
84. The project might have made some marginal contributions to improvements in food security. According to the impact survey report of 2019, the project managed to reduce the duration of the primary hungry season before the main harvest, from 2.8 months to 1.2 months (Nema 2019). Similarly, there were positive stories from the field on how the project enhanced the dietary diversity of targeted beneficiaries – a result of an increased variety of vegetables, it can be assumed. The Nema project targeted household food security through increased rice and vegetable production. While evidence of production quantities is limited (see section on agricultural productivity), the diversity of vegetables being produced in the Nema project

³¹ PPE field mission, 28th September – 5th October 2021.

³² National rice production decreased since the mid-2010s from around 50,000 tons to between 20,000 - 30,000 tons in 2017-20, which is equivalent to an acreage of rice between 30,000 and 40,000 ha, Nema covers more than 12,000 ha of rice production. (Sources: Nema report and KII).

³³ The UP evaluation data collection at baseline and endline included data for different vegetables which made it difficult to standardize the analysis compromising the integrity of the data for comparability purposes.

communities are a proxy of household food security.³⁴ For Nema, the PPE asserts that the availability of more diverse horticultural produce (tomatoes, onions, cabbage, sweet potatoes, cowpeas, peppers etc.) contributed to improved dietary diversity, with variations between the wet and dry seasons.³⁵ This has led to the reduction of the hungry season, although approximately 27 per cent of surveyed households were still experiencing a hungry season. However, the challenge of post-harvest losses, due to lack of cold-storage capacities and limited access to markets, still persist, and may affect the long-term food security impact of the project if not timely addressed.

85. **The project had an inadequate package of nutrition-specific interventions.** Potential impact pathways were rather linked to perceived increased production, incomes and agricultural diversity. Chronic malnutrition (stunting) of children at endline in the project areas remained unchanged at 25 per cent, similar to the situation at baseline (Nema 2019b), – a figure that is above the national average of 15.7 per cent.³⁶ A key design weakness of the Nema project was the lack of consideration given to improvements in nutrition security, particularly for children aged 0-59 months, while at the same time having nutrition indicators at the impact level.

Household income and assets

86. **There is no quantifiable evidence of household-income increase but circumstantial evidence exists of such increases.** Stories from the field mission suggest improvements in household income and financial control, by women in particular, for the vegetable gardens component of the project. The evaluation mission explored issues related to diversification of income sources and general improvements in the quality of life. In the various regions visited, women and youth reported having more incomes in their control, as a result of their participation in the vegetable gardens scheme; however, these claims cannot be quantified in the absence of income data. Reports of improvements in the quality of life, which include being able to send their children to school as well as meeting the needs of their families, point to positive changes in incomes at household level. Income generated from the sale of horticultural produce has reportedly enhanced women's empowerment, as they are able to contribute to the welfare of the children and the household.³⁷
87. **Modest increases in household assets were reported; however, these cannot be fully attributed to the project.** The Nema endline survey suggests increases in household assets; however, these were modest and cannot be solely attributed to the project in the absence of a counterfactual. The proportion of households reporting ownership of radio and mobile telephones during the project endline period stands at 92 per cent and 97 per cent respectively, compared to baseline values of 79 per cent and 89 per cent (Nema 2014). Households reporting access to electricity, refrigerators and animal-drawn carts stand at 37 per cent, 18 per cent and 65 per cent respectively, compared to baseline values of 15.9 per cent for access to electricity, 8.2 per cent for refrigerator ownership and 42.2 per cent for animal-drawn carts (Nema 2019b). The reported increases in asset ownership are slightly above the rural averages that were collected during 2015/2016 for The Gambia integrated household survey.³⁸ For the more productive assets such as livestock, there were limited differences between the baseline and endline values, indicating limited contribution of the project to the accumulation of productive assets.

³⁴ There is a diversity of vegetables being produced in the project community.

³⁵ This is because some vegetable tend to perform well in the wet compared to the dry season and vice versa.

³⁶ The Social and Economic Impact of Child Undernutrition in The Gambia.

³⁷ PPE field mission, 25 September to 05 October 2021.

³⁸ The Gambia integrated household survey of 2015/16 shows that current household asset ownership for radio is 59.7 per cent, television 16.2 per cent and for refrigerator, 3.5 percent. No additional data was obtainable for the other assets where data was collected for the RIMS baseline and endline surveys to provide additional comparisons.

Human and social capital

88. The Nema project set a very good base for developing human and social capacities, with its strong component on capacity development and working with farmers' organizations as an entry point for the targeting of beneficiaries.
89. **The project broadly contributed to developing capacities through a variety of training and other activities.** The Nema project made significant investments in capacity development, as depicted in its theory of change. These capacity-development activities were targeted at individuals, communities, and farmer and producer organizations/groups level. Beneficiaries who were met during the PPE field mission demonstrated increased human capital because of knowledge and skills acquired from training in areas such as financial literacy, business and group leadership. However, the project fell short in systematically collecting data at group, individual and household levels on the extent to which positive changes among beneficiaries were due to capacity development. A capacity-impact assessment had been called for by a supervision mission in 2016, but was never done.
90. Despite Nema's strong focus on training, it is also not clear to what extent the capacity needs of the different groups that were trained were assessed, apart from the capacity-needs assessment of the farmer organizations (Amza 2017). Additionally, no data was found in terms of post-training impact assessment for the different targeted groups. For a project that had considerable investment in capacity development, a training impact assessment would have further strengthened evidence on human and social capacity development.

Institutions and policies

91. **At the grassroots level, the project successfully supported and enhanced the capacity of farmers' organizations.** The main achievement of the Nema-Chosso project in this area has been the strengthening of farmer groups that were supported during implementation, through capacity development and promotion of women into leadership roles within these groups. While FOs were not a new feature in the context of The Gambia, the role played by the project in enhancing the capacity of women to take up leadership positions is commendable. An evidence-based approach was followed in determining the capacity needs of the FOs, resulting in a capacity-development plan.
92. **The project laid the foundation for increased access to markets and market information by smallholder farmers, through the creation of the agriculture value chain platforms.** The underlying objective of the AVIP initiative was to ensure that women and youth groups were linked to key value chain actors and the provision of market prices and market access information (as already mentioned in the effectiveness chapter). This was to be achieved through coaching, mentoring and value chain financing, and through building the capacity of women and youth groups to negotiate with value chain actors. The PPE observed that the setting up of these platforms came too late into the project, and as such most of them were not functioning and risked collapsing if not immediately supported in reaching maturity.
93. At the national level, the Nema project supported the formation of the National Women's Producer Cooperative to participate in, and influence, policy dialogue. These producer organizations were linked to the National Coordinating Organisation of Farmer Associations of The Gambia, for continued guidance, mentorship and support (IFAD 2021b).
94. **Summary – rural poverty impact.** The findings on rural poverty impact are not conclusive, in the absence of sufficient and credible data. There is anecdotal evidence which suggests that household income and assets have increased, as well as food security impacts. Again, no conclusive data is available on agricultural productivity due to lack of systematic measurements data. There were significant levels of investments in human and social capital development, but the project did not conduct any capacity-development impact assessment that could provide tangible

contribution evidence. Policy and institutional impacts were assessed to be weak, due to limited policy and systems influence. This partly affected sustainability of benefits negatively, as will be elaborated in the next section. Overall, the rural poverty impact is rated **moderately unsatisfactory (3)**.

Sustainability of benefits

95. Sustainability of benefits means the likely continuation of net benefits from a development intervention beyond the phase of external funding support. It also includes an assessment of the likelihood that actual and anticipated results will be resilient to risks beyond the project's life (IOE 2015b, 39)
96. **An exit strategy was developed and is in place but was not fully implemented.** The exit strategy was designed to enhance ownership and sustainability of the key project achievements and outcomes (Nema 2019a).³⁹ Accordingly, the exit approach was to be implemented from April to December 2019 (Nema 2019a). The evaluation found little evidence for the implementation of the exit strategy, which partly explains some of the sustainability challenges which are further elaborated in this section. It is fair to say the design and implementation of the exit strategy was left too late in the project cycle.
97. **The vegetable gardens infrastructure was found to be mostly self-sustaining.** Most of the vegetable gardens groups visited during the field mission were found to be fully functioning. Even without continued external support, the groups were able to maintain their management committees and reinvest their profits in the operations and maintenance of their gardens. Sustainable access to markets and cold storage challenges are other important risk considerations for the continuation of benefits for this component, as observed during the field mission.
98. **Since much of Nema infrastructure was completed relatively late, there was limited focus on operations and maintenance in the project.** But beneficiaries and their groups benefited from the various organized business trainings and extension activities. Much O&M took place in the context of traditional work groups (*kafos*), and arrangements were reportedly effective in dealing with some of the recurrent maintenance and repairs, particularly in vegetable gardens. For lowlands water control and upland erosion infrastructures, beneficiaries were participating in O&M but were often overwhelmed by the labour and financial requirements, without the support of public services that may use better equipment and materials.⁴⁰ Some other communities worked through dedicated water-user groups for lowland rice production, which were established prior to the project.
99. **The PPE did not find significant Government capacity or political will in contributing to the long-term financial and technical capacity of infrastructure maintenance.** The implementation of the project followed a project-based approach with no mechanism for continuity. This corroborates with the findings of the 2016 IFAD Gambia CPE, which highlighted a lack of financial and human resources, ownership and technical capacity to sustain much of the built infrastructure. The design of the Nema project moved towards sturdier, durable infrastructure, but had not simultaneously convinced the Government to adopt the infrastructure as a public good to ensure its sustainability (IOE 2015).⁴¹ Informed respondents during the field mission often lamented the lack of ownership of the infrastructure that was constructed. Project ownership remained largely fragmented, without clear post-project roles and responsibilities for sustainability. A lack of commitment at the central level meant that the operations and maintenance mechanisms at the community level would not fully function, especially in view of weak capacity of management committees at the community level. Regional

³⁹ Nema-Chosso Exit and Sustainability Strategy, March 2019.

⁴⁰ Also observed in IFAD 2018, para.57.

⁴¹ The Gambia CPE Report, page 22.

administrative systems could have been an avenue for longer term financial and technical capacity, but these remained largely weak.

100. **The management of the tidal-irrigation schemes is beyond the capacity of farmers' organizations.** Proper drainage requires the support of a technician to manage floodgates according to tides and rains. As a result, in some communities, the field mission found some rice fields flooded and not usable for rice production. Despite the community members having been trained on operations and maintenance, training has often been provided as a one-time activity and lacked the consistent follow-up required for better and more sustainable infrastructure ownership and maintenance (IOE 2020).⁴² The sustainability of the irrigation system impacts on rice production intensification, which is highly dependent on the maintenance of the irrigation infrastructure.
101. **Summary:** Project benefits are being sustained, particularly for the vegetable gardens, due to relatively strong designs. The same cannot be said for the tidal rice and lowland development, where delays in the implementation of the infrastructure did not facilitate effective institutionalization of the operations and mechanisms. In addition to poor design and construction quality for the market-access roads (to fields and markets), the lack of handover to the National Roads Authority for ongoing maintenance was an additional limitation to sustainability. Despite a relatively well-developed exit strategy, the evaluation found that this was not fully implemented in its entirety. Limited institutionalization of successful project activities hindered sustainability. As such, the sustainability is rated **moderately unsatisfactory (3)**.

B. Other performance criteria

Innovation and scaling up

102. **IFAD defines innovation** as a process that adds value or solves a problem in new ways. In order to qualify as an innovation, a product, idea or approach needs to be new to its context, useful and cost-effective in relation to a goal, and able to "stick" after pilot testing.
103. **The matching grant initiative was new and innovative to IFAD in The Gambia.** The CISF, commonly known as the "matching grant", was launched to promote investment and access to relevant and productive farm machinery, equipment and infrastructure, in order to enhance productivity. The key objective was to reach women and youth lead enterprises. However, the evaluation found that women and youth were constrained in accessing the matching grant scheme, because of the financing model.⁴³ The attempts to alter this model during the MTR did not significantly change the composition of the beneficiaries.⁴⁴ Despite the foregoing challenges, there is scope under the ROOTS project to further refine the matching grants initiative, make it fit for purpose and evolve it into an innovative approach.
104. The Nema project interventions were mostly limited in their innovativeness, with instead an advancement of many of the IFAD approaches used in The Gambia over the past two decades. On this basis, the innovation criteria is rated **moderately satisfactory (4)**.
105. The **scaling-up evaluation criterion** concerns the extent to which the programme interventions have been (or are likely to be) scaled up by Government authorities, donor organizations, and the private sector and other agencies.
106. **The Nema successor project, ROOTS, adopts many of the elements of the Nema project, with improvements based on the lessons learned.** The design

⁴² Infrastructure case study report.

⁴³ The CISF used a 45:45:10 formula (for project matching grant, finance through Banks or suppliers, and beneficiary down-payment respectively).

⁴⁴ At mid-term the project matching grant share was increased from 45 to 60 per cent and the finance requirement reduced to 30 per cent to stimulate demand and interest among the IFAD target groups.

of the ROOTS project is largely a continuation of the Nema project activities; it therefore does not qualify as scaling up, as per the IFAD definition. The extent to which the project will make changes in the approaches of the Nema project, in particular lowlands rice development, the matching grants and the agricultural value chain platforms, will determine the extent to which these interventions can be considered for scaling up.

107. **There is significant interest in the Nema project activities, as evidenced by the significant level of co-financing for the ROOTS project.** Most of the Nema interventions are being scaled up under the Nema successor project, ROOTS, which is being implemented by IFAD with significant co-financing of US\$27 million (in total) from Agence Française de Développement, the Organization of the Petroleum Exporting Countries, and the Global Environment Facility (GEF). Despite the implementation challenges that were experienced under Nema, it appears that the approach remains relevant to the context of The Gambia, hence the interest from other development partners.
108. There is limited evidence of the scaling up of Nema project interventions, apart from the co-financing interest of other development partners. Much of the Nema interventions have been adopted by the ROOTS project. On this basis, the PPE evaluation assesses scaling up as **moderately unsatisfactory (3)**.

Gender equality and women's empowerment

109. In The Gambia, women do most of the work in agriculture. They are involved in rice production, done on a subsistence basis, and horticultural production, done on a small scale with produce sold at local markets to supplement household incomes. Despite there being more women in the rice and horticultural value chains, this does not translate into improved social status. Most are involved in the production of non-cash crops, and thus women farmers operate at low levels of productivity owing to limited control and ownership of productive resources such as land, inputs, credit and technology, as well as markets (FAO and ECOWAS 2019)⁴⁵ This directly correlates to the many barriers that Gambian women face because of deeply inherent sociocultural and traditional barriers, and ineffective implementation of laws pertaining to marriage, divorce and inheritance.
110. **A gender-based targeting approach to gender mainstreaming was applied with partial success.** At design, Nema was a gender-targeted project – through its focus on vegetables and rice, which are primarily considered as women's crops in The Gambia – with the objective of reaching 80 per cent women out of total beneficiaries. Women and women's groups were targeted through capacity-development activities, to enhance their production, business-management, infrastructure-maintenance and literacy skills (see effectiveness section). While the gender-targeting impact at completion could not be fully validated due to weak monitoring systems, the project reported to have directly benefited 27,000 women, and others indirectly from implementation of activities.
111. **The female beneficiaries felt empowered through having more income in their control.** Women were active members of the project-supported groups for the vegetable gardens and rice schemes. Some confirmed increases in income in their control, enhancing their position in the household economy. There were reports of self-esteem through recognition from families, improved ability to pay for school fees, and contributions to feeding families from income generated from women's business enterprises. The extent to which this has led, or contributed to, gender parity and intra-household decision-making was not established during the evaluation.⁴⁶

⁴⁵ FAO and ECOWAS Commission. 2019. National Gender Profile of Agriculture and Rural Livelihoods – The Gambia. Country Gender Assessment Series, Banjul.

⁴⁶ PPE field mission, 25 September 2021 – 05 October 2021.

112. **Occupying leadership positions and management of productive group assets was similarly empowering for women.** The project facilitated the ascendancy of women to leadership positions, through their participation in the project and in particular at the group level. The PPE field mission established that women made up at least 90 per cent of the membership of the groups working in the vegetable gardens, and about 60 per cent in groups working in the rice fields. In both instances, women occupied leadership roles in 80 per cent of the groups where they were either leading or occupying the second-highest position.
113. However, the ascendancy of women into leadership positions at group level did not translate into increased women's representation in governance at the community level, in particular in the village development committees. Cultural barriers, and the patriarchal nature of the Gambian society, continue to hinder the systemic changes required to ensure that women fully participate within the village structures.
114. **Women did not benefit significantly from the CISF, an intervention designed as an innovative way of rural financing.** Of the 27 grants that were provided by the project to individuals, only four benefited women directly (see effectiveness section). The design of the CISF did little to address key challenges faced by women in accessing finance, in particular a lack of the collateral required by financial institutions. Additionally, despite being trained on business management, many women also lacked the capacity to prepare bankable business plans, as well as the matching capital to access the finance – making it difficult to qualify and access the finance. Efforts that were made to change the matching grants qualification criteria did little to improve the situation.
115. **The project only partially addressed the root causes of gender inequality.** There was no evidence to suggest that the project contributed to changes in the wider sociocultural norms and practices that drive gender inequality. Nema failed to ride on its high gender targeting by engaging the Government to address the root causes of gender inequality and discrimination. At the time of completion, the project left key issues related to land ownership untouched; these include improving women's access to land and promotion of gender-equal inheritance.
116. **A gender-transformative approach should have resulted in a decreasing trend of gendered crops and technologies,** in order to see more women becoming engaged and leading highly productive rice production, for instance. There is still a gendered (between male and female) division of crops and crop technologies, according to respondents in the mission's focus-group discussions, regardless of the fact that women were involved in the production of all types of crops. For instance, women focus on rice and vegetables, but men tend to take over when production becomes more productive and market-oriented, and even more so in tidal irrigation. One of the reasons is that women alone cannot always mobilize the required labour, technology and finance demands for such endeavours.
117. **Summary – gender equality and women's empowerment:** The project contributed to positive changes in the participation and empowerment of women, and at best can be categorized as being partially gender responsive. Nema provided a foundation for reducing gender inequality, as acknowledged with the project's nomination for the IFAD Gender Awards in 2019. However, there were missed opportunities due to the lack of a gender strategy and the absence of a gender specialist in the project. The project could have benefited from a comprehensive gender analysis at design, to identify specific production issues faced by women and formulate interventions aimed at addressing gender inequality. Long-standing sociocultural norms that drive gender inequality were not addressed. Gender and women's empowerment is therefore rated as **moderately satisfactory (4)**.

Environment and natural resource management

118. The rapid depletion of the natural resource base in The Gambia is a result of increasing population pressure, shifting cultivation, deforestation and increasing

climate variability (IFAD 2015a, para. 71). Agricultural viability and productivity of lowland agriculture, traditionally a women's domain, are threatened by reduced water infiltration from the river, siltation and sedimentation from flash floods, and high rainwater run-off from the uplands. In the uplands, land degradation is largely due to inappropriate land-management practices, deforestation and overgrazing (IFAD 2015a).

119. **Environment and natural resource management were fully mainstreamed in the Nema project and reinforced through the ASAP Chosso grant.** The Nema-Chosso project helped with erosion control, soil and water management, and enhanced agricultural NRM practices on more than 12,000 ha of lowland and 4,000 ha of upland cropping areas, while strengthening NRM protection in several ways. This happened mainly through investments in NRM infrastructure in lowlands and uplands, and capacity development of farmers and extension workers under the farmer field school model. Additionally, Chosso activities targeted forestry and mangroves. But the planned reclamation under Nema of 3,100 ha of seriously degraded lowland soils (due to salination and acidification) had to be cancelled due to its high costs. It is too early to say what impact project interventions had on erosion, soil fertility, water availability and savings, and on reduced siltation, soil salinization and waterlogging, since no relevant data had been collected (or at least made available) by project completion (IFAD 2015a, Appendix 12.1, p.165).⁴⁷
120. Nema-Chosso provided detailed information on NRM output achievements, including on land, forest and mangroves restoration, and the training of farmers in soil-, water- and land-management practices. The main gaps concerned the quality of some of these interventions, uncertainties about sustained adoption of soil-, water- and land-management practices, and how Chosso interventions synergized with other Nema interventions in watershed management.
121. **Integration of Chosso's more targeted NRM/CCA activities into Nema's broader infrastructure and commercialization activities was weak, and the integrated watershed-development approach was never realized as planned.** Project activities were only partly coordinated between Nema and Chosso. Due to its late start, Chosso never managed to contribute much in terms of environmental and climate-sensitive planning of infrastructure in Nema. The PCR had sections on NRM and CCA, mostly referring to Chosso-specific outputs, but did not mention NRM or CCA in the Executive Summary. The Nema endline survey also did not touch upon NRM and CCA much. A separate endline impact study was done by Chosso, in the form of a resilience assessment.⁴⁸ With a minor exception, the resilience assessment found no changes in the perception of resilience by the population, between Chosso baseline and endline (comparing 2017 with 2019). Lack of coherent NRM planning and actions was also reflected in the ultimate failure of the project to advance with planning and investing through an integrated watershed-development approach, which was supposed to focus on mini watersheds along the Gambia River (box 2 and annex VII box 4 for watershed co-management plans).
122. **Nema assessment and management of environmental and social risks and effects was carried out effectively.** Environmental and Social Management Plan (ESMP) **reporting did not find significant harmful effects, with some opportunities to improve the reporting on social issues.** The PDR had a detailed Environmental and Social Review Note (IFAD 2015a, Appendix 12.1), with Nema being classified as a category "B" project. Nema developed an ESMP that was monitored throughout implementation by the National Environment Agency as

⁴⁷ The ROOTS project may wish to pick up on some of these activities. This would be facilitated through the continuity of staff on NRM/CCA and M&E in Nema Chosso and ROOTS.

⁴⁸ The Resilience Profile Analysis (baseline and endline surveys) measured the evolution of resilience among project beneficiaries using the FAO SHARP (Self-evaluation and holistic assessment of climate resilience of farmers and pastoralists) tool.

one of Nema’s service providers. The Agency carried out occasional supervision of environmental management in the field. Their reports helped to keep attention on potentially harmful infrastructure development and agricultural practices. Reports commented in detail on reviewed infrastructure, and found overall no significant harmful environmental effects of the project. The reports focused on the environment and less on the social side of ESMP, such as social inclusion and target group participation.

123. **Summary – environment and natural resource management.** The environmental and natural resource base improved in several places served by the project, in uplands and lowlands, through the infrastructure and capacity development of Nema-Chosso, as apparent through field observations and anecdotes. But the quantitative evidence of such effects is still scarce. The lack of a coherent and integrated watershed-development approach is also likely to limit these effects. IFAD’s Social, Environmental and Climate Assessment Procedures were followed for all project activities. ESMP monitoring in the field did not show significant negative impacts on the environment. On balance, environment and natural resources management is rated **moderately satisfactory (4)**.

Box 2

Integrated watershed approach for NRM and CCA management – not implemented by Nema

Chosso grant activities for NRM and CCA were designed to link with other Nema activities under the umbrella of a holistic ecosystems and integrated watershed approach that was favoured under Nema. A watershed approach would have linked lowlands and uplands development through landscape management of mini watersheds, along with adjacent communities in the larger basin of the Gambia River (annex VII, box 4 on more detailed plans).

The integrated watershed-management plans were never developed. National capacities and priorities were not there, nor invested in by the project such as through dedicated technical assistance. Developing such mini-watershed plans was considered a complex, time-intensive and potentially controversial undertaking, which would have required reconciling many different ecological, socio-economic and political interests of different farmers, including pastoralists, and other groups in these communities and watersheds. Moreover, the distance between the locations of Nema and Chosso sites limited the synergy of interventions and did not favour a watershed-development approach. Watershed management was also seen as a policy issue that touched on land and water development, and would have required a national policy framework and master plan that was not there.

One Nema PCR lesson for Chosso pointed out that – despite weak implementation in Nema – a watershed approach still remains optimal to address the complexity of the many cause-and-effect relationships between uplands and lowlands, vis-à-vis the hydrological dynamics of the Gambia River (PCR annex 1). The ROOTS project plans to assess a more realistic and less overly optimistic approach to watershed management, such as through pilots for certain mini watersheds where technical, social and political situations are favourable. The organization TerrAfrica already did some work in The Gambia on the enabling environment for watershed development, and GEF intends to follow-up through its co-finance in ROOTS.

Adaptation to climate change

124. This criterion evaluates the contribution that IFAD-supported interventions have made in reducing the negative impacts of climate change through dedicated adaptation or risk-reduction approaches.
125. **The PPE field team found farmers to be well aware of climate change and related threats to their livelihoods and sources of sustenance;** this awareness was compounded by first-hand experiences over the years of the effects of adverse climate events such as drought, floods and storms and their interrelated dynamics, with the weakening natural resource base. The Sahel Region has been familiar with such localized climate threats for many decades, and has already developed certain coping mechanisms. Farmers were also cognizant of the linkages between

deforestation, bushfires and climate change. PPE interviews noted that what mattered most in such a situation was to clarify to all stakeholders the difference of an innovative CCA approach versus “business-as-usual” – i.e. to unpack innovative CCA goals and farmers’ options for changed behaviours and activities.

126. **Many Nema-Chosso project outputs directly supported farmers’ climate change adaptation**, as noted in previous sections of this report (chapter III.A Effectiveness). Flash flooding and erosion were better controlled, water barrages in lowlands reduced flooding and salinity threats, ways to increase water efficiency were promoted on upland crops and in vegetable gardens, and drip irrigation that would allow for more efficient water use was introduced in a few pilot gardens (to be expanded by the ROOTS project). Nema beneficiaries and extension workers gained know-how on innovative CCA strategies and climate games – the latter a practical and participatory way of creating awareness and honing in on clear messages (box 3). Climate resilience was further underscored through the development of a Climate Adaptation Curriculum for rice and vegetable producers, and the investments into agroforestry woodlots and mangrove restoration (IFAD 2021b, para. 201). As for NRM activities, the ultimate outcomes of changes in farmer behaviours and climate resilience are not known, as the project did not collect any data on these indicators. The project also supported the update and revitalization of the National Climate Policy and Committee, the drafting of the National Adaptation Plan, and the attendance by Nema representatives in UNFCCC Conference of the Parties 22 to 25 (annex VII, box 6).
127. **Other major activities planned by the Chosso project in terms of CCA were not accomplished or were cancelled due to the late start of the component.** These included alternative community water-harvesting methods (earthen trenches, retaining dams, run-off capture) and climate-resilient design adaptation.
128. **A major lesson learnt from Chosso was that any measure to strengthen climate resilience has to capitalize on the knowledge of smallholder farmers and their communities regarding climate fluctuations and extreme events**, such as droughts and floods (IFAD 2021b, annex 1). It was also learned that farmer field schools were an effective way to test and validate CCA innovations before farmers were convinced to adopt changes. Access to timely early-warning information enabled farmers to take rational decisions concerning crop and variety choices. Providing users of shared natural resources with alternative livelihoods eased the pressure on fragile environments and contributed to building climate resilience.
129. **Summary – climate change adaptation.** Adaptation to climate change was a Nema priority at design and a focus during implementation, particularly through the ASAP Chosso grant. The project made a number of contributions to climate resilience at the farmer level, such as through erosion and water-control infrastructure, awareness raising and training. Nema-Chosso laid the basis for the ROOTS project to carry forward these activities. There were improvements in the climate resilience of local communities, though not well documented. The project also had a major effect on the revitalization of climate change policies and structures at national level, and to some extent on mainstreaming CCA in other ministries, such as Agriculture. Due to its relatively late start and short duration, there were missed opportunities to climate-proof Nema infrastructure, and planned infrastructure for community water harvesting was canceled. On balance, adaptation to climate change is rated **moderately satisfactory (4)**.

Climate games: Background and example

Climate games were developed by the Red Cross and Red Crescent Centre; IFAD provided backstopping to local staff (including the multidisciplinary facilitation teams). The games were well received by extension agents and beneficiaries, as a way to better transfer knowledge to beneficiaries, and because they allowed a move to the ground and avoided just sitting in classrooms and talking about things.

One example of such a game was related to explaining and operationalizing an early-warning system in a community. You speak to one person as a representative of the community, and ask that person to share the message with someone else in the community. Then that person will share the message with yet another person. By the time you get to the last participant in the game, you realize how distorted the initial message shared with the first person has been, and that this is what actually happens in reality. This is why the project looked for ways of strengthening early-warning systems through providing simplified information – a system where everybody gets uniform information on time and knows exactly what to do.

Source: PPE key informant interview.

C. Overall project achievement

130. The overall achievement of the expected results was moderate, given the patchy evidence of improvements in production and productivity, food security, and household incomes. More evidence of success was observed in the women and youth-managed vegetable gardens, which were found to be profitable and economically empowering during the field mission. Despite the modest achievement of results, Nema contributed to more participation and economic empowerment of women, and paved the way for the reduction of gender inequality. However, it paid little attention to changing gender roles, and to labour and technology effects such as in intensified rice production. Long-standing sociocultural norms that drive gender inequality were not addressed, as part of transformative gender contributions.
131. The project largely achieved its outreach targets but missed the critical ones, particularly those related to infrastructure development. Construction in the watershed-development component was often of poor quality, particularly in rice production. Design, construction and sustainability challenges were lower in vegetable gardens when compared to lowland rice production, but the project paid too little attention to vegetable storage, cold stores and transport to markets.
132. The late delivery of much of the commercialization component reduced the project's planned market-demand orientation and drive. Nevertheless, tangible achievements included access roads, and market capacity development of farmer organizations, youth and platforms, but with much less stimulation of private sector and market demand linkages (pull factors) than planned. Matching grants were an innovative and useful way of providing access to finance to farmers, but were not effectively targeted to reach the intended beneficiaries.
133. The project made notable contributions in the area of environmental and natural resource base in both lowlands and uplands. It also made a good start towards stronger climate resilience at farmer level, through erosion- and water-control infrastructure, awareness raising and innovative training. Nationally, Nema revitalized climate change policies and structures. However, delays in starting the climate initiatives that were under the Chosso component undermined the climate performance of the project.
134. The sustainability of several project interventions was weak due to the Government's limited technical and financial commitment to mainstream activities. This is partly because of the limited support to Government capacity development by Nema.
135. On balance, the evaluation assesses overall project achievement as **moderately satisfactory (4)**.

Key points

- Nema was well aligned with national and IFAD policies. Project design was based on a solid analysis and on past lessons, following a long line of IFAD projects in The Gambia that were dedicated to lowland rice production and targeting of women farmers. It had strong linkages with the PIWAMP project (2006-2014), whose lessons were applied in Nema. Its intention was to scale up past IFAD country experiences and models.
- Nema design offered a convincing rationale and approach, which emphasized integrated watershed planning, the need for solid economic analysis of opportunities and market linkages. However, it failed to take fully into account the implementation environment that was politically, economically and institutionally fragile, and the mixed performance of similar past infrastructure projects.
- The Nema project largely achieved most of its physical targets, but critical rice infrastructure was not well designed and constructed, particularly in tidal irrigation. Lack of complementary, well-coordinated and phased interventions in NRM, CCA and market access at project sites limited potential achievement of objectives in its watershed component.
- Despite the timely start and a stable PSU, Nema's operational efficiency was low due to late delivery of critical production infrastructure and weaknesses in commercialization support. Project management had problems in decentralized, community-based delivery and M&E. The project's economic and financial returns are uncertain, due to major issues with infrastructure quality, its utilization and productivity.
- Assessment of the impact on rural poverty was inconclusive, in the absence of sufficient data, but anecdotal evidence suggests that some beneficiaries indeed enhanced their household incomes, assets and food security. Agricultural productivity was supported, but the extent of this and its lasting effects are not clear.
- IFAD made positive contributions to the participation and economic empowerment of women and youth through targeting and enhanced income from vegetable gardens. For women, this paved the way for the reduction of gender inequality. However, in the absence of specific activities targeting the root causes of inequality, gender transformation is yet to be achieved.
- The project also made a good start towards stronger climate resilience at farmer level, through erosion- and water-control infrastructure, awareness raising and innovative training. Nationally, the project had a major effect on the revitalization of climate change policies and structures.
- Sustainability of project achievements is questionable and the Government relies mainly on continued project support for infrastructure O&M. The development of Government capacity was not sufficiently targeted by Nema to ensure mainstreaming of project activities post project implementation. A project exit strategy exists, but it was not actively pursued as part of project completion and handover.

D. Performance of partners

IFAD

136. **IFAD's supervision and implementation support were adequate and frequent, but suffered from a high turnover of IFAD country programme managers/country directors.** The Nema project was regularly supervised by IFAD, with at least one supervision (or MTR respectively) per year, and two in 2015, a critical year for the project. An implementation support mission was also added to the regular supervision in 2019, to facilitate completion. The missions included multidisciplinary teams, with relevant experts identified in consultation with PSU staff and key Government authorities. Supervision reports were generally of good quality and open about constraints and problems faced by the project; there were few surprises at later stages. Many of the actionable supervision recommendations were followed, others not, such as on targeting, including international irrigation expertise and carrying out a study on capacity development impact. The MTR provided an excellent analysis of the status quo and helped to turn the project around, particularly in its infrastructure and commercialization, albeit at a rather late stage. The MTR benefited from participation by the Food and Agriculture Organization of the United Nations (FAO) Investment Centre, which had also been involved in design.
137. IFAD supervised the project directly through its country programme managers and later country directors. But as noted by the PCR, the high turnover of managers/directors during project implementation (a total of six) did not always make it easy for the Nema team to adapt to the monitoring and supervision styles of the different IFAD staff. Since IFAD decentralization and opening of the West Africa Hub in Dakar in 2018, Nema clearly benefited from the direct supervision and presence of IFAD staff in the region. Thanks to this proximity, follow up of Nema activities, requests for no-objection and withdrawal applications of funds were facilitated. In general, IFAD's fiduciary management team enabled Nema to identify appropriate responses to immediate implementation questions.
138. **IFAD exercised flexibility in view of the COVID-19 situation, which led to repurposing of remaining Nema funds to reduce the impact of the pandemic.** Funds were repurposed for the purchase of COVID-19 items and a further extension of the project for six months.
139. **IFAD performance was affected by the political fragility in The Gambia.** This affected project implementation before the change of Government in late 2016/early 2017. The authoritarian nature of the previous Government reduced the pool of capable Government personnel, as reportedly many had quit the Government by the end of its 20-year period. It also led to undue interferences in staff matters and other day-to-day management, which limited IFAD's choices in dialogue with the PSU, according to IFAD and Gambian sources. Governance improved in 2017, which led to autonomy in technical implementation decisions for the PSU and the project. At the same time, this called for even stronger capacity development in public service, compounded by continued brain-drain and change of a large generation of civil servants which had started since the late-1970s to 1980s in ministries and agencies.
140. **IFAD was involved in some upstream policy dialogue and helped Nema in policy formulation, but support was limited due to missing country presence.** There were no signs that IFAD effectively promoted the dialogue with its planned co-financiers in Nema, the AfDB and IsDB, to carry out joint supervision missions for Nema, nor move the agricultural agenda forward, beyond some informal exchanges. IFAD engaged in some of the policy dialogue on the second generation National Agricultural Investment Plan-Food and Nutrition Security 2019-26. But ultimately, the absence of continuous country presence and office were given as the main reason for limited engagement, and this situation also did not improve with IFAD decentralization and the regional hub in neighbouring Senegal.

141. **Furthermore, there were missed opportunities for joint collaboration with the other Rome-based agencies, in particular FAO**, in vegetable gardens and market access; stronger collaboration could have been established with the FAO agroforestry project (financed by GEF). This particularly so, considering that both projects were working with women producer organizations. Farmer field schools could have offered another area of closer collaboration for mutual learning and scaling.
142. **In sum**, IFAD performed well on project supervision and assistance, notwithstanding some problems generated by frequent IFAD staff turnover, limited policy dialogue and missed opportunities with partner agencies. On balance, **IFAD's performance is considered satisfactory (5)**.

Government

143. **Nema implementation and oversight arrangements were clear and stable, even during the change of Government in 2016/2017**. In line with arrangements for similar projects, the Ministry of Agriculture was the executing agency for Nema, with the Central Projects Coordinating Unit of the Ministry ensuring the overall strategic coordination and harmonization of Nema investments, and carrying out internal Nema audits. The PSU, under the leadership of a project director, undertook day-to-day management and execution of the project. The Government constituted the Nema project steering committee for strategic oversight and guidance and the approval of annual work plans. The project steering committee met twice a year. It included representatives from the participating ministries, including one from the Ministry of Youth and Sports, as well as representatives from civil society, women's and farmers' organizations.
144. **The Government met all the conditions for first disbursement and provided 80 per cent of its counterpart contributions, including paying salaries of Nema staff**. A PSU with overall good capacities was appointed (already mentioned under efficiency). The Government ensured that the special account was managed in compliance with IFAD's rules and regulations, and availed the national audit to undertake annual audit of the project. In addition, the Government monitored the project through the Ministry of Finance and Economic Affairs aid coordination directorate and the strategy directorate at the Office of the President, and organized the annual project managers' forum, where project experiences are shared.
145. The Nema project financial management and internal control systems were largely adequate and met the fiduciary requirements of IFAD. The PSU finance unit was adequately staffed with appropriate segregation of functions. Internal controls, such as expenditure authorization procedures, were in place. The system was able to prepare satisfactory periodic reports. Internal audits were conducted by the central project coordination unit, with issues raised being largely addressed. But the unit was understaffed and only three internal audits had been conducted since 2015 (IFAD 2021b; IFAD 2019a). The external audit was received on time and included field visits, with detailed and relevant recommendations on selected operational matters. In 2019, the Auditor General issued an unqualified opinion confirming that all project audits were carried out in accordance with international standards.
146. **The project procurement plan was clearly defined, but procurement faced challenges of slow process and contract management (as mentioned elsewhere)**. All procurement activities were managed by the PSU under the supervision of the central project coordination unit in the Ministry of Agriculture. Bids were evaluated by the Ministry's contracts committee, headed by the Ministry's Permanent Secretary, with selected PSU staff participating. The procurement system allowed an important amount of advance payments that did not favour contract closure of non-performing service providers (MTR). The Government provided regular

and timely counterpart funding and cash contributions to the project, including for staff salaries, cumulating to 78 per cent of plans by completion. Cumulative IFAD disbursement (withdrawal) records show that 99.9 per cent of all loans and grants had been disbursed by project completion, with a steady increase over the years, with the exception of 2015 when the ASAP grant was added.

147. **The Nema M&E function suffered from a reliance on an outsourced, complex and ultimately non-functional country-wide M&E database system** (the Gambia National Agricultural Database) under the responsibility of the Ministry of Agriculture's Planning Services Unit (now Department of Planning).⁴⁹ Although Nema provided support to revamp this system, the Department of Planning ultimately failed in collecting relevant agricultural production and productivity data for rice and vegetables (as discussed elsewhere in the report). This is recognized at the Department and its new management appears intent on addressing this situation. The Department did somewhat better in establishing MIS, also with Nema support and the help of other service providers.
148. **The Government has shown a moderate level of performance and ownership regarding Nema investments.** The Government so far has not committed itself to contribute to sustainable financial and technical management of Nema infrastructure investments beyond handover to beneficiaries and project completion, as a continued public goods function (a point emphasized by the 2015 CPE and the 2019 Country Strategic Opportunities Programme). Instead the Permanent Secretary in the Ministry of Agriculture called for a much stronger private sector role for land, production and market development, particularly of rice, during his meetings with the PPE. Other members of Government questioned the sole focus by IFAD on *kafos* as entry points for rice cultivation. In practice, the Government still continues to support public engagement in IFAD-supported rural infrastructure, through the procession of projects funded by various donors, including by IFAD (ROOTS).
149. **There was a perceived or actual disconnect of projects, such as Nema, from mainstreamed Government services.** The Government wished to see more control and involvement in projects by Government agencies and services. Trade-offs between a separate PSU and the desirable mainstreaming and sustainability in the Ministry of Agriculture and the Department of Agriculture were recognized by IFAD. But the PSU in Nema had good reasons in a fragile political situation, where Government services did not live up to expectations, were weak and costly, overreaching and unable to connect across departments (the lesson from PIWAMP). Some of the previous Government's transgressions and undue interferences in Nema project management were already mentioned in the previous section.
150. **Nema did too little to define and support the long-term and strategic development of Government.** Nema involved many Government departments as service providers, but the decision on PSU resource use remained largely with the Nema project director. To some extent, this negatively affected capacity development in the public sector, and a better definition of the functions of Government than in the past, such as in sub-sector planning and implementation for rice. A related area was the need for stronger engagement and capacity development of regional and local public institutions in rural areas.
151. **Summary – Government performance.** Government performance was marked by continuity and familiarity with IFAD procedures and basic requirements. Otherwise, the search is on for a better-defined role and support for performance by Government in IFAD projects and those by other donors. On balance, Government performance is rated **moderately satisfactory (4)**.

⁴⁹ While the quality of project management and M&E were consistently rated moderately satisfactory in supervisions, the MTR dissented with a moderately unsatisfactory rating (i.e. of 3), mainly due to the lack of coordination of SP. The trends in ratings were similar for performance of M&E systems and the responsiveness of service providers.

Key points

- IFAD's supervision and implementation support were adequate and frequent, but the high turnover of IFAD country programme managers/country directors affected management continuity.
- IFAD (and Government) performance suffered from the political fragility in The Gambia, particularly before the change of Government in late 2016/early 2017.
- There were missed opportunities for joint collaboration with the other Rome-based agencies, in particular FAO, in vegetable gardens and market access, where stronger collaboration would have been possible, such as in the FAO agroforestry project (financed by GEF).
- The Nema M&E function was weak since it relied on an outsourced and non-functional countrywide M&E database system (the Gambia National Agricultural Database) under the responsibility of the Ministry of Agriculture Planning Services Unit (now Department of Planning). This affected the collection of routine outcome M&E data, in particular on productivity.

E. Assessment of the quality of the project completion report

152. **Scope:** The scope of the PCR is by and large comprehensive and follows the PCR guidelines. The project was assessed against all the relevant evaluation criteria as outlined in the PCR guidelines by IFAD.⁵⁰ The other criteria were also addressed in the PCR report; these included innovation, scaling up, gender and women's empowerment, targeting and access to markets. Additionally, there was also an assessment of the performance of the Government and IFAD. The scope of the PCR is rated **satisfactory (5)**.
153. **Quality:** The PCR is considered to be of acceptable quality. However, gaps and limitations exist in terms of addressing some of the critical project performance challenges that were observed during the PPE. The PCR lacks adequacy of data to support some of the claims made in the report, for example the agricultural productivity data. Additionally, data-quality issues were observed in the area of efficiency analysis. For example, per-unit cost of key infrastructure works were not clearly articulated for vegetable gardens and tidal irrigation. Criteria such as rural-poverty impact and gender and economic empowerment of women were overrated, without sufficient evidence being provided to support ratings. The PCR quality is rated **moderately satisfactory (4)** in terms of quality.
154. **Lessons:** The PCR provided some good lessons with regards to several aspects of the project, which were in line with the findings of the evaluation mission. These included in particular lessons on procurement, capacities of service providers and construction companies, a participatory watershed approach and more attention to markets. However, it lacked substance in acknowledging some critical challenges that were inherent in the project, particularly the lack of adequate supervision of infrastructure construction, poor quality of some of the designs (including limited engagement of community members in the infrastructure designs), and the poor targeting performance of the CISF. The critical lessons of not having a strong M&E system in the project were not sufficiently discussed, as well as the challenges of working with multiple service providers. The PPE rates this criterion as **satisfactory (5)**.
155. **Candour:** The PCR did not openly admit some of the project shortcomings in a clear and candid manner. Additionally, some of the project ratings were not supported by clear and convincing evidence, due to data gaps. Overall, the evaluation gives a candour rating of **moderately satisfactory (4)**.

⁵⁰ The PCR follows the key evaluation criteria of relevance, effectiveness, efficiency, sustainability and rural poverty.

IV. Conclusions and recommendations

A. Conclusions

156. This section presents the conclusions that are of broader relevance for IFAD programming in The Gambia and for the ongoing Nema successor, the ROOTS project.
157. **The Nema project supported different rice-infrastructure approaches that were, however, constrained by gaps in design, quality of construction, and operations and maintenance.** The social, environmental, economic and gender aspects of rice production in the different ecologies in The Gambia were not always sufficiently considered, especially for tidal irrigation. Constructed infrastructure often did not have the technical quality to make rice production profitable and sustainable, or even permit farmers to use it. After more than 20 years of IFAD engagement, there still is no official Government strategy, master plan and up-to-date set of feasibility studies for rice production and marketing in The Gambia that could guide priority public investments, ensure quality design, and support women farmers and higher national self-sufficiency in rice under different import-price scenarios. Public capacity for planning and overseeing investments in the rice sector remains weak.
158. **The integration of NRM and CCA in mini-watershed development and infrastructure planning was not sufficiently considered.** Generating the climate resilience of households and ecological systems requires a change in thinking about systems linkages and acting accordingly through holistic planning of micro watersheds. Climate-smart infrastructure and production technologies deserve to receive more attention at design. Late start of the Chosso component handicapped NRM and CCA efforts in Nema. The time appears right to pilot an integrated watershed approach in a few mini watersheds in the ROOTS project.
159. **Project implementation and management was imbalanced due to weak Nema decentralization, local synchronization of different service providers, and Government mainstreaming.** The project experimented with a new model, with an independent PSU working through a multitude of contracted service providers, public and private. The PSU had difficulties in managing, supervising and, in particular, coordinating and integrating all these providers' work into communities and project subcomponents, yet it arguably did so better than IFAD's predecessor project, which was mostly carried out by mainstream Government agencies. The drawback for Nema was that infrastructure activities were often poorly integrated into responsible Government agencies such as the National Roads Authority or the Soil and Water Management Services at the Department of Agriculture. This limited Government ownership and policy, strategy and quality oversight, and led to disconnect with certain departments.
160. **The PPE did not find any major progress towards resolving the problem of low sustainability in rural infrastructure,** starting from weak quality and profitability to lack of shared management arrangements between beneficiaries and Government after project completion. The infrastructure build–bust–build back cycle has not been broken, except in some of the vegetable-garden schemes. Government still relies on a continuous line of donor-financed projects to finance major infrastructure maintenance and rehabilitation, and beneficiaries cannot shoulder the technical, financial and input challenges, even when trained in operations and maintenance.
161. **Investments in women's and youths' vegetable gardens are only sustainable in the long run if they are firmly embedded in strong market and demand linkages.** The Nema project was only successful in very few gardens, in terms of expanding such linkages and ensuring that women's and youths' management groups were well equipped to work for the market, through better skills and smarter storage and transport facilities. Contract farming and outgrower

schemes have been struggling to take off in The Gambia. The capacities and skills of the Ministry of Agriculture and those of farmer organizations are still too production-oriented. More market-oriented private sector expertise is required. Some experiences have been gained through Nema on involving women and youth, as groups or individuals, in such marketing schemes, and on how to overcome their business and finance constraints. This is a basis to work on in subsequent projects.

162. **The root causes of gender inequality and discrimination were only partially resolved.** Much was done in Nema to support and empower women, such as through directly targeting their main crops, and supporting them in leadership positions and through adult-literacy classes. There were missed opportunities to better engage women in planning their own future, through strengthening their hands within their communities. More attention would be required to address the root causes of discrimination, such as land rights, and to mitigate changing gender roles with new technologies, as in tidal irrigation. It is good to see that the ROOTS project has a designated inclusion and gender expert to represent women's concerns in communities and in the national arena.
163. **Many new ways of operations brought forward by Nema will require adjustments and adaptive management,** in particular infrastructure for women in rice, market-demand orientation for women's and youth's vegetable gardens, and a mechanism to ensure the sustainability and ownership of different types of infrastructure. Improvements to M&E and evidence-based decision making in The Gambia are essential for that. The complete lack of information in Nema on project effects (beyond trial data) of actual adoption, agricultural productivity and benefits is not in line with IFAD standards and expectations. **These and other aspects of rural development in The Gambia are being taken up by the Government through the ROOTS project,** the IFAD-funded successor for Nema that started in 2020. The Gambia's newly re-elected democratic Government, as of December 2021, offers an opportunity to move beyond past constraints and to put public support for rural areas on a sound footing, through participatory investments in rural communities, strengthened Government services, mobilization of private sector and civil society, and enabling policies and regulations at national level.

B. Recommendations

164. The following recommendations are made in relation to the ongoing and future IFAD projects in The Gambia, based on the foregoing conclusions.
165. **Recommendation 1: Support the development of a new strategy and national master plan for rice development in The Gambia, while ensuring that they are informed by watershed analyses.** This would include a stocktaking of the current technical and business models for rice production and marketing, and updating existing feasibility studies and their social, environmental, economic and gender effects. Institutional roles, capacities and development needs of public and private actors, including construction contractors, deserve attention. It is also recommended that site-specific rice-development plans be developed using holistic mini-watershed approaches, with long-term sustainability and climate adaptation as key considerations. Such approaches could be piloted through the ROOTS project. The potential of external support for rice and land development, through technical assistance and South-South cooperation, should be explored. IFAD could use its experience and comparative advantage in The Gambia to facilitate buy-in and contributions from relevant development partners in the sector.
166. **Recommendation 2: Move ongoing and future vegetable schemes in The Gambia consistently towards market, demand and private sector orientation.** More public and private institutions with specialized technical and first-hand professional business and market experiences need to be engaged, in creating demand linkages with vegetable growers. The development of capacities of responsible institutions towards adoption of commercial approaches should be done

early on in projects. There is need to better identify market challenges according to type of market, product and market conditions (prices, demand and supply). Despite the challenges of contract farming so far, the concept should be revisited and promoted alongside other marketing approaches.

167. IFAD's focus on women and youth calls for better access of these groups to capital, for market opportunities. The CISF/matching grants initiative may need to be redesigned to direct its execution more towards IFAD target groups. The challenges faced by women and youth in accessing financial services, due to lack of collateral, makes it imperative to resolve issues around tenure security, though complicated. Alternative approaches for increasing finance access, such as asset-based financing (leasing) and savings as a pathway to personal wealth, need to be emphasized.
168. **Recommendation 3: Ensure sustainability and ownership by adopting an exit-at-entry approach for ongoing (ROOTS) and future projects.** The development and implementation of exit strategies for sustainability should start at the beginning of project implementation. This would include stronger community ownership of project infrastructure through informed and continuous participation in infrastructure design, construction for quality, and sustainable manageability. Projects should consider piloting community-based operations and maintenance, through community funds that are self-managed by groups or communities and made available early on in the project, to allow for ongoing learning and refinement.
169. **Secondly, find a better balance between independent project management and mainstreaming in Government, and between central and decentralized management.** The ongoing ROOTS project should consider progressively developing Government planning and budgeting capacities for infrastructure sustainability, to build long-term public commitment and coherence. This could be achieved through stronger integration of certain project activities into responsible Government agencies. More Government ownership is called for in policy, strategy and quality oversight, connectedness between Government departments across ministries, and engagement of regional and other decentralized structures.
170. **Recommendation 4: Address the root causes of gender inequality and discrimination, using contextually appropriate upstream and downstream strategies.** This will require a comprehensive gender analysis for ongoing and future projects, to review and protect women's rights and to better understand regulatory and legal pathways to facilitate women's access to land for rice and vegetable production and other resources. IFAD in The Gambia should adopt an integrated upstream and downstream approach of the legal and customary frameworks related to women's access to land, capital and other resources. Upstream this requires working on family law, especially inheritance and marriage, to promote joint land ownership and inheritance rules that are more favorable to women. Downstream, projects should apply behavioural approaches, through awareness campaigns that involve men and engage them as positive-change agents for access, control and ownership of resources by women.
171. As customary rights often prevail over the official legal system in The Gambia, ongoing and future projects should engage in a structured, continuous dialogue with traditional community leaders and authorities; this can progressively influence negative gender norms in agriculture and identify gender win-win situations. Similarly, dialogue between men and women should be promoted and encouraged within households. Specific gender-related activities and interventions need to be sufficiently planned and budgeted for at design, including indicators to monitor and track progress.

Basic project data

			Approval (US\$ m; % of total cost)		Actual (US\$ m; % of approved cost)	
Region	West and Central Africa Division	Total project cost (including all cofinancing)	76.59			
Country	Gambia (The)	Project cost without AfDB and IsDB cofinancing	43.89		40.68	92.7%
Project number	1100001643	IFAD loan	7.07	9.2%	6.99	99.0%
Type of project(sub- sector)	Agriculture	IFAD grant (DSF) (original and additional)	27.35	35.7%	25.66	93.8%
Financing type	Grants (DSF, ASAP) and loans (HC)	IFAD ASAP (Chosso)	5.00	6.5%	4.96	99.2%
Lending terms (loans)	Highly concessional	Borrower (the Government of The Gambia)	2.84	3.7%	2.20	77.6%
Date of approval	10/12/2012	Beneficiaries	0.68	0.9%	0.16	23.5%
Date of loan agreement	20/12/2012	Domestic lenders	0.95	1.2%	0.70	73.7%
Date of effectiveness	20/12/2012					
Loan amendments	n.a.	AfDB cofinancing	17.70	23.1%	n/a	n/a
Loan closure extensions	6 months	IsDB cofinancing	15.00	19.6%	n/a	n/a
IFAD country programme managers	Haoua Sienta (current) Leopold Sarr Pascale Kabore Moses Abukar	Number of beneficiaries (household members)	264.861		413,712	
Regional director(s)	Sana Jatta (current) Nadine Gbossa Lisandro Martin Ides de Willebois Mohamed Beavogui	Midterm review			20/02/2018	
Lead evaluator for project performance evaluation	Raymond Mubayiwa (Eoghan Molloy until Sept. 2021)	Date of original project completion			31/12/2019	
Project performance evaluation quality control panel	Fabrizio Felloni Johanna Pennarz Eoghan Molloy	Date of actual project completion			30/06/2020	
		Date of project completion report			May 2021	

Source: IFAD 2021b.

ASAP: Adaptation for Smallholder Agriculture Programme; DSF: Debt Sustainability Framework; HC: highly concessional.

Definition and rating of the evaluation criteria used by IOE

Criteria	Definition *	Mandatory	To be rated
Rural poverty impact	Impact is defined as the changes that have occurred, or are expected to occur, in the lives of the rural poor (whether positive or negative, direct or indirect, intended or unintended) as a result of development interventions.	X	Yes
	<i>Four impact domains</i>		
	<ul style="list-style-type: none"> Household income and net assets: household income provides a means of assessing the flow of economic benefits accruing for an individual or group, whereas assets relates to a stock of accumulated items of economic value. The analysis must include an assessment of trends in equality over time. 		No
	<ul style="list-style-type: none"> Human and social capital and empowerment: human and social capital and empowerment include an assessment of the changes that have occurred in the empowerment of individuals, the quality of grass-roots organizations and institutions, the poor's individual and collective capacity, and, in particular, the extent to which specific groups such as youth are included or excluded from the development process. 		No
	<ul style="list-style-type: none"> Food security and agricultural productivity: changes in food security relate to availability, stability, affordability and access to food, and stability of access, whereas changes in agricultural productivity are measured in terms of yields; nutrition relates to the nutritional value of food and child malnutrition. 		No
	<ul style="list-style-type: none"> Institutions and policies: the criterion relating to institutions and policies is designed to assess changes in the quality and performance of institutions, policies and the regulatory framework that influence the lives of the poor. 		No
Project performance	Project performance is an average of the ratings for relevance, effectiveness, efficiency and sustainability of benefits.	X	Yes
Relevance	The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, institutional priorities, and partner and donor policies. It also entails an assessment of project design and coherence in achieving its objectives. An assessment should also be made of whether objectives and design address inequality, for example by assessing the relevance of targeting strategies adopted.	X	Yes
Effectiveness	The extent to which the development intervention's objectives were achieved, or are expected to be achieved, taking into account their relative importance.	X	Yes
Efficiency	A measure of how economically resources/inputs (funds, expertise, time etc.) are converted into results.	X	Yes
Sustainability of benefits	The likely continuation of net benefits from a development intervention beyond the phase of external funding support. It also includes an assessment of the likelihood that actual and anticipated results will be resilient to risks beyond the project's life.	X	Yes
Other performance criteria			
Gender equality and women's empowerment	The extent to which IFAD interventions have contributed to better gender equality and women's empowerment, for example in terms of women's access to and ownership of assets, resources and services, participation in decision making, workload balance, and impact on women's incomes, nutrition and livelihoods.	X	Yes
Innovation	The extent to which IFAD development interventions have introduced innovative approaches to rural poverty reduction.	X	Yes
Scaling up	The extent to which IFAD development interventions have been (or are likely to be) scaled up by Government authorities, donor organizations, the private sector and other agencies.	X	Yes

<i>Criteria</i>	<i>Definition *</i>	<i>Mandatory</i>	<i>To be rated</i>
Environment and natural resources management	The extent to which IFAD development interventions contribute to resilient livelihoods and ecosystems. The focus is on the use and management of the natural environment, including natural resources defined as raw materials used for socio-economic and cultural purposes, and ecosystems and biodiversity with the goods and services they provide.	X	Yes
Adaptation to climate change	The contribution of the project to reducing the negative impacts of climate change through dedicated adaptation or risk-reduction measures.	X	Yes
Overall project achievement	<i>This provides an overarching assessment of the intervention, drawing upon the analysis and ratings for rural-poverty impact, relevance, effectiveness, efficiency, sustainability of benefits, gender equality and women's empowerment, innovation and scaling up, as well as environment and natural resources management, and adaptation to climate change.</i>	X	Yes
Performance of partners			
• IFAD	This criterion assesses the contribution of partners to project design, execution, monitoring and reporting, supervision and implementation support, and evaluation. The performance of each partner will be assessed on an individual basis, with a view to the partner's expected role and responsibility in the project life cycle.	X	Yes
• Government		X	Yes

*These definitions build on the Organisation for Economic Co-operation and Development/Development Assistance Committee Glossary of Key Terms in Evaluation and Results-Based Management; the Methodological Framework for Project Evaluation agreed with the Evaluation Committee in September 2003; the first edition of the Evaluation Manual discussed with the Evaluation Committee in December 2008; and further discussions with the Evaluation Committee in November 2010 on IOE's evaluation criteria and key questions.

Rating comparison^a

<i>Criteria</i>	<i>Programme Management Department (PMD) rating</i>	<i>Project Performance Evaluation rating</i>	<i>Rating disconnect</i>
Rural poverty impact	5	3	-2
Project performance			
Relevance	5	4	-1
Effectiveness	5	3	-2
Efficiency	4	3	-1
Sustainability of benefits	4	3	-1
Project performance^b	5	3	-2
Other performance criteria			
Gender equality and women's empowerment	6	4	-2
Innovation	5	4	-1
Scaling up	5	3	-1
Environment and natural resources management	5	4	-1
Adaptation to climate change	4	4	0
Overall project achievement^c	5	4	-1
Performance of partners^d			
IFAD	5	5	0
Government	5	4	-1
Average net disconnect			-15/12=-1.25

^a Rating scale: 1 = highly unsatisfactory; 2 = unsatisfactory; 3 = moderately unsatisfactory; 4 = moderately satisfactory; 5 = satisfactory; 6 = highly satisfactory; n.p. = not provided; n.a. = not applicable.

^b Arithmetic average of ratings for relevance, effectiveness, efficiency and sustainability of benefits.

^c This is not an average of ratings of individual evaluation criteria but an overarching assessment of the project, drawing upon the rating for relevance, effectiveness, efficiency, sustainability of benefits, rural poverty impact, gender, innovation, scaling up, environment and natural resources management, and adaptation to climate change.

^d The rating for partners' performance is not a component of the overall project achievement rating.

Ratings of the project completion report quality

	<i>PMD rating</i>	<i>IOE rating</i>	<i>Net disconnect</i>
Scope	n.a.	5	n.a.
Quality (methods, data, participatory process)	n.a.	4	n.a.
Lessons	n.a.	5	n.a.
Candour	n.a.	4	n.a.
Overall rating of the Project Completion Report	n.a.	4.25	n.a.

Rating scale: 1 = highly unsatisfactory; 2 = unsatisfactory; 3 = moderately unsatisfactory; 4 = moderately satisfactory; 5 = satisfactory; 6 = highly satisfactory; n.a. = not applicable.

Key project performance evaluation issues and questions

Climate change adaptation and watershed management

One of the main objectives of Nema-Chosso was to mitigate climate change threats through better soil, water and land management, and the restoration of natural resources. The Chosso grant was specifically designed to address increasing soil salinity and land degradation, and to enhance mangrove protection and forest restoration (woodlots). At the national level, the Chosso grant supported the Government with institutionalizing and mainstreaming climate change in policies and strategies. At the farm level, it helped with raising awareness for climate change adaptation and natural resources management, such as through farmer field schools and farmer associations.

Chosso grant activities to support climate change adaptation were designed to link with other Nema project activities, particularly those for lowland development, in theory under the umbrella of a more holistic ecosystems and integrated watershed approach.

Questions for this project performance evaluation:

- (i) How relevant are the integrated watershed-management, and other holistic ecosystems and landscape approaches, to the Gambian context? How were they applied in The Gambia?
- (ii) Eventually, did the planned watershed-management approach lead to a more integrated service delivery and better natural resources management (NRM)? How effectively were Nema-Chosso climate change adaptation (CCA) activities integrated with the other project investments and activities?
- (iii) How well have critical ecosystems been restored, i.e. woodlots, agroforestry and mangroves? And how does this affect local communities, including project target populations?

Additional questions

- How effectively did Nema-Chosso support the Government and the United Nations Framework Convention on Climate Change (UNFCCC) country focal point in reviving the National Climate Change Committee and mainstreaming CCA in policies and otherwise?
- To what extent were the various project tools introduced by Nema-Chosso for more climate change awareness – such as climate games and the climate adaptation curriculum for rice and vegetable – helpful in leading farmers to adopt better CCA/NRM practices in a sustainable way? How did this affect farmers' climate resilience?
- How relevant and useful were existing community development plans from a previous IFAD-funded project?

Sustainability of infrastructure investments

Infrastructure construction and rehabilitation accounted for a large amount of project resources, and its operations and maintenance (O&M) models and sustainability were questioned by the 2016 country programme evaluation (CPE). Specifically, the CPE (2015/16) highlighted the lack of beneficiary ownership and questionable choice of technologies, as well as many technical, organizational and financial problems after completion. These issues concerned mainly water and irrigation, vegetable gardens, poultry and roads. In contrast, the project completion report's (PCR) overall conclusions on sustainability are optimistic, although they are rated only as moderately satisfactory.

In order to more fully understand the prospects for sustainability and the level of ownership among beneficiary communities, the project performance evaluation (PPE) will assess the extent to which beneficiaries were involved in participatory infrastructure planning and the development of feasibility studies. The PPE will also assess the approaches adopted for infrastructure construction, including the level of participation of communities, farmers' organizations (FOs) and local labourers, and the extent to which Nema-Chosso managed, supervised and tracked infrastructure works and achievements to ensure quality and participation for better sustainability and ownership. In this regard, the PPE will seek to draw lessons for ongoing and future projects on how project beneficiary communities or municipalities, administrative regions or ward councillors could be engaged from the outset, with a view to taking over the maintenance and management of infrastructure investments.

Questions for the PPE:

- (i) How was infrastructure handed over? Were adequate arrangements made for post-handover and post-project completion O&M?
- (ii) To what extent has the choice of technologies and quality of infrastructure been conducive for sustainability? What are the trade-offs between infrastructure of higher quality and durability, and the capacity of beneficiaries and communities to manage and maintain?
- (iii) What are the finance models and beneficiary willingness to pay for continued O&M beyond project completion?
- (iv) Has the Government demonstrated the capacity or political will in contributing to long-term financial and technical capacity?

Additional questions

Participation in design and construction

- Was sustainability considered in planning?
- To what extent were beneficiaries involved in participative infrastructure planning and the development of feasibility studies?
- How was construction carried out, including the participation of communities, farmer organizations and local labourers? How did the Nema PSU manage, supervise and track infrastructure works and achievements, to ensure quality and participation for better sustainability and ownership?
- Were IFAD Social, Environmental and Climate Assessment Procedures (Environmental and Social Impact Assessment/Environmental and Social Management Plan) issues well addressed and integrated in planning and implementation?

Continued attention after completion

- To what extent do current Government activities and projects, such as ROOTS, continue to support O&M and long-term sustainability in Nema sites?

Institutionalization of market development and demand linkages

At midterm, most activities of the agricultural commercialization component, particularly institutional and business development, were either still works in progress or facing challenges. In line with the findings of the 2016 CPE, the 2018 midterm review (MTR) suggested fundamentally redesigning the rice and vegetables marketing component, and focusing more on private investment support along the principles of 4Ps (public, private and producer partnerships). The PCR emphasizes progress and project achievements in marketing and commercialization.

In particular, the PPE will assess to what extent the Agriculture Value Chain Interaction Platforms (AVIP) performed and contributed to enhanced market access and incomes, particularly with regard to the participation of targeted farmer/producer groups and the goal of engaging and strengthening the private sector through these platforms. In addition, the PPE will assess the effectiveness of the matching grant model (i.e. the Capital Investment Stimulation Fund [CISF]), in terms of its design and execution, inclusion of women and youth, and the rationale and effects of changes in the model after midterm.

Questions for this PPE:

AVIP/CISF

- How did AVIP perform and contribute to enhanced market access and incomes, particularly in view of the participation of targeted farmer/producer groups and engaging and strengthening the private sector through these platforms?
- How effectively was the matching grant model (i.e. CISF) designed and executed?
 - What were the rationale and effects of changes in the model after midterm?
 - Was there sufficient support for beneficiaries at start-up?
 - What access did women and youth have to matching grant investments?
- How well were AVIP and matching grants linked to other Nema investments in watershed, vegetable gardens and other project activities?

Vegetable marketing and processing/youth business models

- How effective was the support for vegetable marketing and processing? Has the model of contract farming been supportive of reliable market access, all-year farming and more direct linkages to hotels and the tourism industry? To what extent have prices and other contractual conditions improved from the perspective of small producers?
- Has the project succeeded in helping vegetable growers to produce at scale, at a high quality and in a timely manner, to facilitate market demand, at good prices?
- What special opportunities have been developed for young people and youth groups in horticulture and value chains (including marketing and processing), and also through accessing CISF?

Rice marketing

- How effective was the support for vegetable marketing and processing? Has the model of contract farming been supportive of reliable market access, all-year farming and more?
- How effective was the project's support for rice marketing through strengthening farmer and producer organizations and the market information system? To what extent did this lead to more access and higher profit margins in rice markets for women, and also to better access for production inputs and finance?

Contribution towards gender-transformative change

Women were the main project target group, apart from youth. According to the PCR, Nema has done well in terms of women's participation and empowerment and gender equality. The PCR rates gender equality and women's empowerment as highly satisfactory (6), but the current PCR does not sufficiently back up this rating of a transformative impact on gender equality and empowerment of women.

In the agreement at completion point for the 2016 CPE, IFAD Management and the Government of The Gambia agreed to further explore the piloting and use of both the Gender Action Learning System and household methodologies during Nema-Chosso implementation. The extent to which this agreed action was implemented remains unclear, and is not reported against in the PCR.

Questions for this PPE:

- (i) Within the framework of rural development and NRM, to what extent did the project address the root causes of gender inequality and discrimination through promoting sustainable, inclusive and far-reaching social change?
 - Did the project successfully challenge gender roles, norms and power relations in the project intervention areas, and if yes, how?
 - Did the project set off processes of social change beyond the immediate project intervention?
- (ii) Why did the project deliberately choose not to carry out the originally proposed targeting strategy and operational plan, which was intended to provide an analysis and baseline to develop concrete measures to address the empowerment of women and youth (MTR)? What was the effect of this decision on the effectiveness of project targeting?
- (iii) How did the project address insecurity of land tenure with regard to women and youth?
- (iv) To what extent did the project take into account the time constraints and workloads of women in its design and implementation?

Agricultural productivity (Efficiency, Impact)

Increased agriculture productivity and profitability through promoted farm and crop models are critical for infrastructure sustainability and sustainable income and poverty impact, including through reliable rural input and finance support services, and market opportunities and access for target groups.

- To what extent have project investments and activities resulted in higher agricultural productivity (yields per hectare or returns to labour)? Particularly in lowland rice production and vegetable gardens?
- What evidence does Nema have for such productivity increases?
- How effectively has the project supported the targeted beneficiaries, particularly women and youth, and (or through?) farmer and producer organizations to enhance their sustainable access to critical inputs, finance and other agricultural support services?
- What were the potential trade-offs (or not) between productivity and NRM/CCA targets? What innovations were promoted to reduce potential trade-offs between agricultural productivity, NRM/CCA and sustainability; and how effective were they?
- What contributions have productivity increases made to food security and nutrition and poverty impact?

Effectiveness of capacity-development activities

The Nema-Chosso theory of change (ToC) depends strongly on capacity development and training (see marked activities and outputs in ToC in annex V). These activities were targeted at individuals, communities, farmer and producer organizations, Government and service providers, in both project components. The extent to which such capacity development and training have been adequately and effectively delivered and led to sustained results in beneficiary awareness, skills, technology adoption and infrastructure operation and maintenance, is critical for project success.

The 2018 midterm review (MTR) suggested reallocating Nema funds to capacity development for the remainder of the project, in procurement, agribusiness, Ministry of Agriculture youth staff mentoring, and overall capacity of private and public service providers. Interviews with the IFAD teams suggested that capacity development deserves attention above all in communities; however, it is also critical at national Government level, in a country with significant brain-drain and the replacement of many retiring staff by new recruits in ministries and agencies.

Questions for this PPE:

- (i) To what extent has capacity development been driven by underlying capacity needs assessments and clear prioritization? How did Nema-Chosso use its knowledge-management function to support capacity development?
 - How effectively have agribusinesses, young people, women and FOs been trained to start businesses, use market information systems and enhance market access?
 - To what extent have village farmers' and producers' associations and cooperatives received training for capacity development in managerial and technical skills to provide better services to their members, gain access to agriculture inputs and markets, and sustain their activities and infrastructure (O&M) without dependence on Government support?
 - To what extent have communities and targeted groups in these communities been trained and empowered to effectively participate in planning, monitoring and contributing to project interventions and interacting with service providers?
- (ii) How well have public and private service providers been supported with capacity development for improved delivery to the communities, including Government agencies? How are beneficiaries now using these new skills and new knowledge?
 - Specifically, has there been sufficient follow-up on awareness-raising by farmer field schools along the FAO model, to ensure continued adoption and application of best practices?
 - Were there clear synergies/complementarities between the FAO activities and Nema infrastructure investments?
 - Was this a good FAO/IFAD cooperation model for Rome-based agencies collaboration? FAO providing technical assistance, presumably through the grant financing? What worked and what didn't? Any lessons?
- (iii) What models and implementation arrangements were most effective for delivery of capacity development (training of local facilitators, training of trainers, use of demonstration plots, use of platforms such as AVIP, etc.)?
- (iv) Were the capacity-development methods and training contents relevant, informative and useful for the specifically targeted groups?
 - Has training been replicated and followed up over time as necessary, such as through refresher and advanced training, particularly for community and

farmer group support, market and entrepreneurship development, and on infrastructure O&M?

- How are beneficiaries now using these new skills and new knowledge?

Targeting the poor

The focus in this project was on targeting women, youth and market participants. Yet, it remains a question for IFAD as to whether it indeed reached the more marginalized locations and population groups in The Gambia, particularly when taking a countrywide programmatic approach.

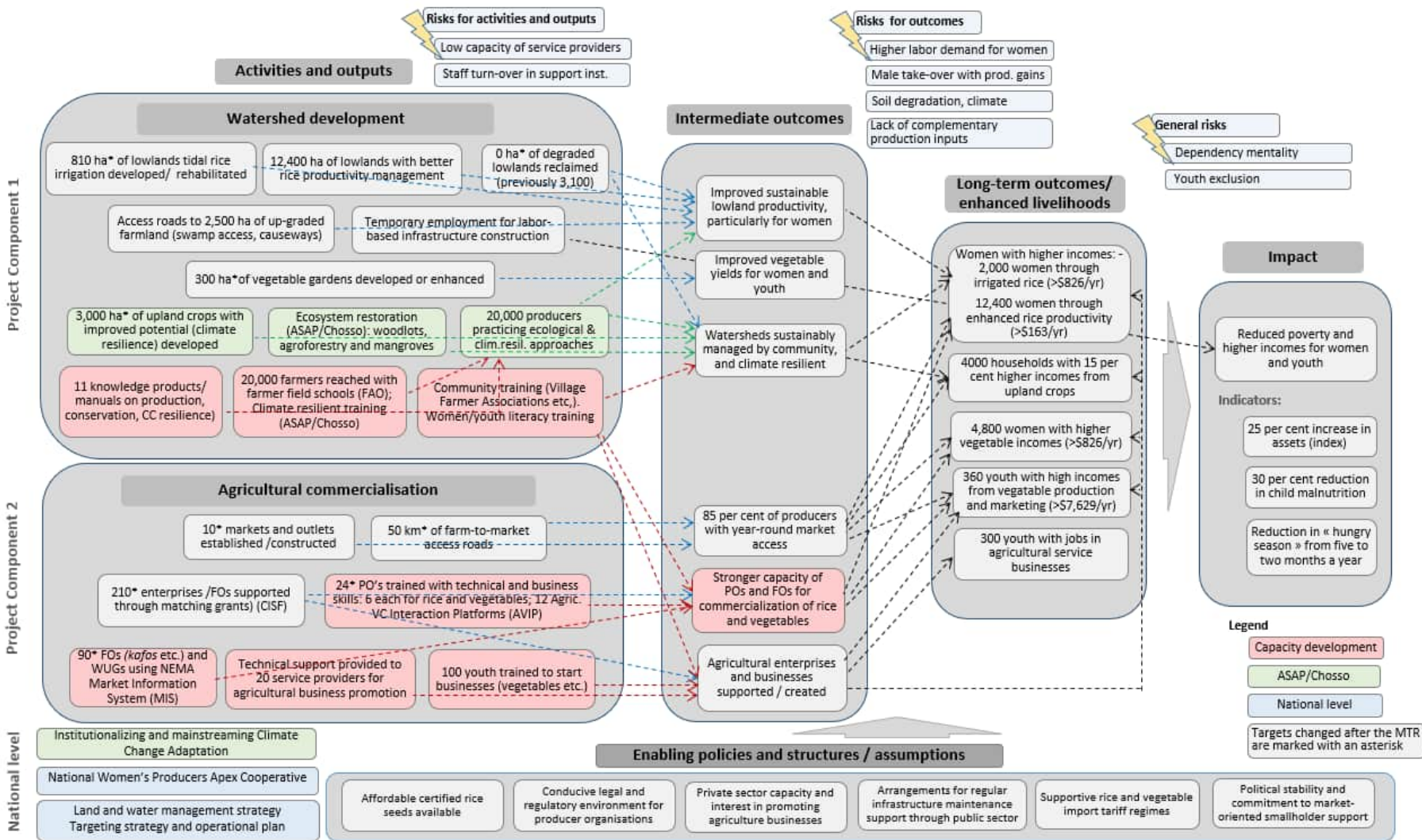
- (i) How did the Nema project approach of soliciting expressions of interest by communities and groups, to determine project sites and targeted groups, affect targeting the poor?
 - Were advanced communities, farmer groups and beneficiaries possibly favoured in this approach?
 - Are there possible trade-offs with effectiveness?
 - To what extent does it matter, given the overall level of poverty in Gambia's rural areas?

Theory of change

1. The Nema project design report (PDR) did not have an explicit ToC. The PPE team reconstructed a ToC based on a review of the PDR, its logical framework and rationale, taking into account recommendations and revised targets of the MTR. The ToC was reviewed with selected stakeholders during the country visit.
2. The ToC shows causal impact pathways from project activities and outputs to project impacts. External factors which influence change are considered and so are the major risks identified in the PDR. Some original design activities and targets were changed in Nema during midterm, but the main thrust of the ToC and the underlying logframe objectives remained the same.
3. The ToC presents the major activities and outputs for the two project components – watershed development and agricultural commercialization – and for national-level cross-cutting activities. Many activities and outputs are focused on infrastructure construction and rehabilitation, including lowland water-management structures, roads, vegetable-garden infrastructure etc. Others are related to capacity development and training which are shaded in red in figure 3. The Adaptation for Smallholder Agriculture Programme (ASAP) Chosso grant specifically supported climate-resilient practices and ecosystem restoration in component 1 (shaded green). Some national-level activities and outputs are added that are about broader institutional and policy support (shaded blue). The ToC includes the major quantitative targets for activities and outputs as revised after the MTR. Revised targets are marked with an asterisk (*).
4. Project outcomes are separated into intermediate and long-term livelihood outcomes. For the watershed-development component, the main intermediate outcomes are improved lowland and vegetable-garden productivity and yields, and well-managed and sustainable watersheds. Outcomes for the agricultural commercialization component are better access to markets for rice and vegetable producers, strengthened capacities of farmer and producer organizations for marketing and commercializing their production, and a sustained uplift in agricultural business activities in the supply of agricultural support services. Long-term livelihood outcomes are increased employment and incomes by various target groups, particularly women and youth.
5. Important assumptions about the external and enabling environment were made, of which those of robust arrangements for regular infrastructure maintenance, availability of certified rice seeds, supportive rice and vegetable import tariffs, and positive enabling legal and business environments, are the most important. Ten risks were identified for Nema at design, such as non-supportive rice- and vegetable-price regimes, low capacity of service providers and lack of complementary farm inputs; also noted were beneficiary and institutional dependency mentality, high labour demand for women, exclusion of youth, and male takeover from women if crop productivity and profitability increased (Nema PDR, pp. 38-40).

Figure 3
Nema reconstructed theory of change

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Source: Elaborated on the basis of PDR and revised MTR logframe data.

Evaluation framework

<i>Criteria</i>	<i>Focus for the PPE</i>	<i>Data sources</i>	<i>Gaps, risks for data collection</i>
Relevance	The PPE will assess to what extent the project has been relevant to the Government of The Gambia strategies for the transformation of agriculture and for its national gender and youth policies. It will examine its alignment with IFAD's focus in the country as articulated in the Gambia Country Strategic Opportunities Programme (COSOP) 2003, the 2011 portfolio review and the COSOP informal update in 2012. The PPE will also review the relevance of the Nema watershed-management approach to the Gambia context and readiness for applying such an integrated approach.	PCR; National Development Plan, sector policies, gender and youth policies; IFAD ROOTS project PDR (2019); documents from other development partners	No major gaps. PCR covers relevance in a comprehensive manner.
Effectiveness	The PPE will review the existing evidence base, including the data collected by the Nema M&E system, supervision reports and the PCR, to establish the results achieved by the project in terms of targets, and conduct further analysis on which parts of the project have been more effective, and how and why project activities have achieved the intended results. In terms of infrastructure, the PPE will take into account the adequacy and quality of infrastructure established or rehabilitated for targeted beneficiaries.	PCR; project M&E data; GIS data (PPE); field visits; stakeholder interviews	<p>Project results presented in PCR draw from project M&E data. M&E logframe data is relatively coherent.</p> <p>The MTR considered pre-2018 M&E as weak but the 2019 report on implementation support notes significant improvements.</p> <p>M&E data may not cover certain aspects, such as functionality and quality of investments and activities.</p> <p>The origin and reliability of some data in the M&E system will have to be carefully validated, given the project's delays in certain components, critical 2018 MTR assessment, change of management history, late start of the Chosso subcomponent, and M&E problems.</p>

Efficiency

The PPE will examine the process and system that underpinned the disbursement of funds. It will also assess whether the physical and financial resources were adequate for successful execution of project activities. Further, the Internal Rate of Return will be reviewed as far as its basic crop and farm model assumptions are concerned, such as infrastructure utilization, technology and infrastructure adoption rates, and crop yields.

PCR; supervision reports; MTR; interviews with former project staff; audit reports

Detailed economic and financial analysis included in PCR, with relevant crop and farm models.

But not clear whether data on productivity and incremental incomes is based on actually measured or estimated figures.

Rural poverty Impact

Impact is defined as the changes that have occurred or are expected to occur in the lives of the rural poor (whether positive or negative, direct or indirect, intended or unintended) as a result of development interventions. The PPE will examine the methodology used in the endline survey conducted by the project in 2019 and the validity of results; additional evidence will be collected from the field in order to validate these results, where possible.

Four impact domains:

- Household income and net assets: household income provides a means of assessing the flow of economic benefits accruing for an individual or group, whereas assets relates to a stock of accumulated items of economic value. The analysis must include an assessment of trends in equality over time.
- Human and social capital and empowerment: human and social capital and empowerment includes an assessment of the changes that have occurred in the empowerment of individuals, the quality of grass-roots organizations and institutions, the poor's individual and collective capacity, and, in particular, the extent to which specific groups such as youth are included or excluded from the development process.
- Food security and agricultural productivity: changes in food security relate to availability, stability, affordability and access to food and stability of access, whereas changes in agricultural productivity are measured in terms of yields; nutrition relates to the nutritional value of food and child malnutrition.
- Institutions and policies: the criterion relating to institutions and policies is designed to assess changes in the quality and performance of institutions, policies and the regulatory framework that influence the lives of the poor.

Baseline and Results and Impact Management System (RIMS) endline impact survey for Nema project as a whole (2013 and 2019 respectively); Resilience Impact Assessment of Chosso grant of December 2019. Baseline Resilience Profile of May 2017

Nema baseline and endline Impact study provides comparison on trends in certain household assets, socio-economic and agriculture variables between 2013 and 2019, in a sample of 30 project intervention locations. No references to actual interventions by location. Some limited gender analysis. Nothing on youth. Not clear whether the original datasets are available.

Chosso grant Resilience Impact Assessment uses the FAO SHARP method for assessing trends in resilience. It refers to some of the key resilience indicators and provides some selected information on results from certain project interventions based on a sample of 18 villages.

Sustainability of benefits	The PPE mission will visit selected project sites to verify the current situation with regards to the sustainability of benefits including different value chain aspects, such as the AVIP (value chain platform), feeder roads and the training imparted to farmer and producer groups. It will assess the operations and management arrangements after project completion, including their financial and technical support dimensions.	PCR; 2019 supervision and implementation support missions	Sustainability is not coherently argued in the PCR, but would require site visits and feedback from primary and other stakeholders; reference to past sustainability findings and conclusions in The Gambia would be required, such as in the 2015/16 IFAD-IOE Gambia CPE.
Gender equality and women's empowerment	The PPE will examine to what extent the project's interventions have contributed to better gender equality and women's empowerment. It will assess to what extent there was indeed a transformative change in terms of gender equality (as implied by the PCR rating of 6), with root causes systematically addressed, gender roles, social norms and power relations fundamentally changed, and resource access equitably improved. With regards to the project's impact on women's incomes, the PPE will examine, for instance, the status of the key gender related activities that were planned, including those to be continued beyond the project.	PCR; Nema and Chosso impact assessments; project design reports; interviews; field visits;	Will require substantial additional data collection and qualitative assessments. Impact assessments provide only very limited evidence beyond some basic information, particular in justification of the PCR of 6 for the component.
Innovation	With regard to project innovations, the PPE will assess, for instance, whether the application of agricultural technology options and specifically NRM and other climate-sensitive infrastructure and technologies and approaches (such as farmer field schools) were truly innovative, and their results. For the market component, the PPE will review the project experiences with innovative institutional and marketing models for The Gambia, such as the AVIP, and benchmark them with other innovative approaches taken by the Government and by other projects in The Gambia.	PCR; project design report; interviews	PCR presents several practices as innovative, including new technologies, organizational, institutional and financial innovations, and implementation approaches. AVIP (value chain platform) and farmer field schools are singled out as new approaches in detailed innovation table. More follow-up needed on innovative NRM/CCA practices.
Scaling up	The PPE will examine project documentation and carry out key informant interviews to assess the extent to which successful interventions under Nema have leveraged policy changes, additional resources and learning to bring results to scale, such as through Government authorities, donor organizations, the private sector and other agencies. This will include a review of Nema AfDB and IsDB cofinancing partners and their adoption of Nema initiatives beyond Nema itself.	PCR; interviews with stakeholders (Government, development partners); review of development partner design documents	Limited references to scaling up in PCR, only with respect to AVIP and Global Youth Initiative Network. Follow-up required on other innovative approaches as listed above, including with other development partners.

Environment and natural resources management	Watershed management was an important objective of the project. The PPE will examine this criterion with regard to the new agricultural practices and technologies that were proposed and implemented as part of project interventions, with regards to soil and water conservation in the ASAP-Chosso subcomponent. Using remote sensing or drones, if possible, the extent of woodlots extension and mangrove restoration will be assessed. The availability, quality and operationalization of watershed-management plans will be assessed, as well as the integration of environment and natural resource management across the various project activities, including ASAP-Chosso, lowland rice development and certain market aspects.	PCR; field visits; geospatial data analysis; interviews; review of project documents	PCR provides detailed target quantity information, including on land restoration and adoption of NRM activities. The main gaps concern: (i) the quality of interventions; (ii) sustained adoption of enhanced sustainable water and land management practices; and (iii) how Chosso interventions synergize with other Nema interventions in integrated watershed-management approach. See under Effectiveness for some general concerns about the data.
Adaptation to climate change	The Gambia faces the threat of climate change, particularly concerning rainfall variability and increased salinity. The PPE will consider the contribution of the ASAP-Chosso and other project components in reducing the threat of climate change in the project areas (if possible) and increasing climate resilience and beneficiaries' capacities to manage short- and long-term climate risks. The analysis would focus on beneficiaries' access to timely climate information, water for productive purposes, and adoption of at least one innovative climate change adaptation strategy.	PCR; field visits; geospatial data analysis; interviews; review of project documents	PCR provides information on activities in support of climate change adaptation and enhanced access to water, and some information on adoption of climate-resilient farm practices. See under Effectiveness for some general concerns about the data.
Overall project achievement	The PPE will provide an overarching assessment of the intervention, drawing upon the analysis and ratings for all above-mentioned criteria.		
Performance of partners <ul style="list-style-type: none">• IFAD• Government	The PPE will assess IFAD's performance in terms of inter alia supervision and disbursement responsibilities. It will also examine the role of Government in undertaking the responsibilities towards project management and implementation.	PCR; supervision reports; stakeholder interviews	Given the dramatic change in Government during project implementation, the PPE will need to clearly identify what aspects of partner performance and project performance were reasonably under the control of the partners, and what aspects were clearly beyond the control of the partners.

Supplementary information

Box 4

Watershed co-management as planned in Nema

For watershed development, the project would first apply criteria to select a number of watersheds; it would proceed to an interactive and comprehensive planning process with the resident community, taking into account the cause- and-effect relationship between lowlands and uplands.

Typically, the area (of watershed development and management plans) would include lands in both the flood plain and the purely rainfed lowland and upland areas, as well as human settlements. The planning process would be conducted throughout the potential work sites, in partnership with existing farmers' associations created by the Participatory Integrated Watershed Management Project and water-users' groups (WUGs). (PDR para. 45)

The resulting watershed-management plans would set out the optimal programme of investments in agricultural water control, related agricultural land improvements and access roads. The iterative process of balancing technical, socio-economic and local political considerations may take several months. However, consensus is crucial in this negotiation, as the intention is a shift from the prevailing unsustainable regimen to the genuine and perpetual co-management of local natural resource assets by Government and villagers. (PDR para. 134)

Nema would ensure that memorandums of understanding are signed between local government/agricultural regional directorates, communities, WUGs and village development committees. Nema would help the farmers and community members set up a functional O&M fund, learning from other communities with experience in running such O&M funds successfully. (PDR, para. 48)

Farmers would be given priority in earning opportunities arising during construction. Nema would therefore sensitize both the contractors and watershed users' groups and communities to discuss and agree to allocate a small proportion of the daily wage paid to each worker/labourer as a contribution to the O&M fund, to be managed by the WUGs in identified villages.

Source: Nema PDR 2012, para. 45-51 (IFAD 2015a, para. 45-51).

Table 6

Physical achievements (outputs) of Nema project as of December 2019

Outputs by component	Indicators	Unit	Targets (MTR revised)	Achieved (PCR)	Achieved per cent
1.1 Watershed planning	Mangroves, woodlots and agroforestry	ha	1,530	2,148	140
1.2 Water control in upland farms	Upland cropping area with erosion control	ha	3,000	4,630	154
1.3 Rice schemes developed	(a) Tidal irrigation rice	ha	810	447.5	55
	(b) Lowland rice with better water control and access	ha	12,400	12,733	102
1.4 Vegetable gardens developed	Rehabilitation/new schemes	ha	300	165	55
1.5 Extension: farmer field schools	Farmers adopting improved agricultural and climate-smart practices	no.	20,000	15,600	78
2.1 Improved rice and vegetable marketing	(a) PO involved in group sale and using MIS	no.	300	372 ¹	124

	(b) Improved farm-to-market access roads	km	50	67	134
2.2 Agriculture enterprises	Enterprises/FOs supported for business development; matching grants provided	no.	210	172	82
2.3 Youth inclusion	Youth starting businesses	no.	100	100	100
3.1 Knowledge products	Products produced and disseminated	no.	11	10	91
3.2 Strengthened M&E system	Data collection, management and analysis systems in place	no.	1	0	0

Source: (IFAD 2021b, Appendix 10).

¹ The 372 groups comprise: 6 POs (cooperatives), 4 WUGs, 12 AVIPs and 350 vegetable groups linked to MIS.

Comments on output targets and achievements

1.1 - Watershed planning. The indicator for enhanced watershed planning was redefined during midterm and no longer reflects the integrated watershed-planning output as intended in the PDR. It now refers to Chosso restoration activities of mangroves (1,402.5 ha), community woodlots (55 ha) and agroforestry (25 ha). Drip-irrigated vegetable production (35 ha) is also included. It is not clear how the figure for achievements of 2,148 ha in PCR Appendix 10 was reached; the text in the PCR refers to a total of 1,831.5 ha (p. 8). Another original output (and related indicator) of 3,100 ha of degraded lowland areas reclaimed for production was dropped during the MTR, partly since costs were too high (2017 SV report).

1.3 - Rice schemes developed. Tidal rice irrigation: more than 50 per cent of tidal irrigation is not new schemes but ones that were converted from previously (mainly) pump irrigation to tidal irrigation.⁸⁹ The PCR provides more details on the type of construction (PCR, p.9): 5.2 km main canals, 17.7 km second canals, 18 km roads within perimeters, 12km access roads to perimeters, 15.6 km drainage canals, and 16.3km flood-protection dykes. Lowlands traditional rice production: this indicator was reported as 3,000 ha (cumulative) up to 2017, according to 2013-2017 statistics provided to the PPE by the PSU. The text of the PCR points out that the MTR target for this indicator was revised to 5,760 ha, (which would mean an achievement rate of 221 per cent as referred to in the text of the PCR). But the PCR Appendix 10 refers to 12,400 ha, the initially planned area, which gives an achievement rate of 102 per cent. The PPE uses the achievement rate of the PCR Appendix table. The PCR provides some details on construction for lowlands (PCR, p.9): 33.2 km of causeways, 3.8 km of anti-salt dikes, 61.9 km dikes, with 185 weirs (barrage) and 61 bridges.

1.5 - Extension. The MTR cumulative figures for this indicator were the same as those presented in the PCR.

2.1 - Improved rice and vegetable marketing. The 372 groups comprise: 6 POs (or cooperatives), 4 WUGs, 12 AVIPs and 350 vegetable groups linked to MIS (which evidently goes beyond the 33 vegetable gardens developed so far by Nema; the MTR revised target was 90). An additional indicator is mentioned in the PCR text. This indicator refers to POs that are in formal partnerships/agreements or contracts with public or private entities (achieved 24, out of 30 targeted at MTR). This indicator was not picked up in the overview table. In terms of rural market-access infrastructure, all roads were completed before the MTR. A previous indicator of rural market places constructed was discontinued after the MTR; market outlets were maintained but are not included in this table as it is unclear to the PPE what this means. The PCR text (p.10) says that 60 outlets were set up.

2.2 - Agriculture enterprises promoted. This indicator was lowered at MTR compared to the PDR, from 432 to 250. According to the PCR, this indicator covers businesses and farmer/producer organizations in rice and vegetable sub-sectors, most likely including the 40 enterprises that obtained matching grants; also including 24 POs trained with technical and business skills (12 AVIP, 6 for rice and 6 for business).

2.3 - Youth inclusion. This indicator target was increased from 30 to 100 youth starting businesses after the MTR. It should be noted that starting businesses does not mean that Nema provided any capital to these businesses (this was the case for 15 youth).

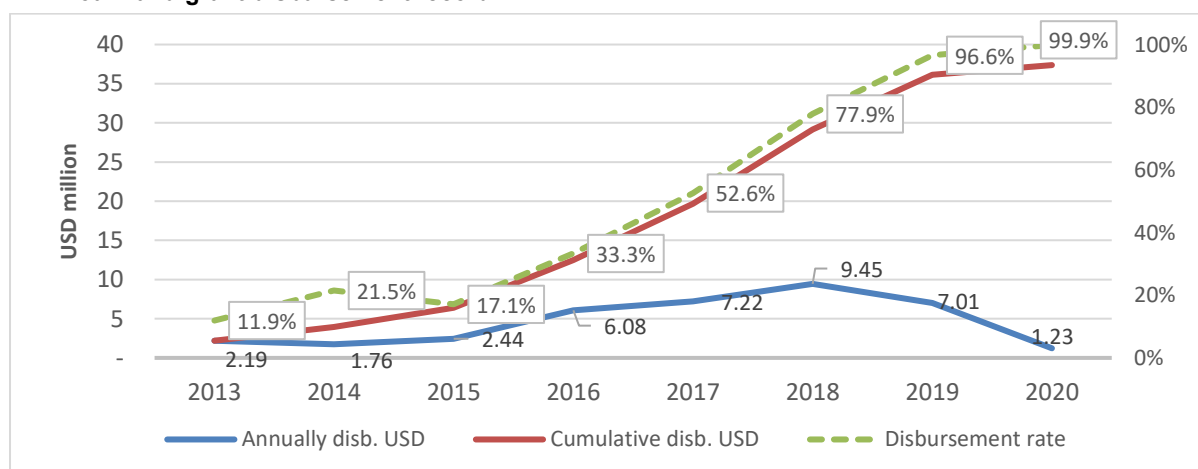
Table 7

Summary of investments to Agriculture Sector as of May 2015

Donor	Project	US\$ million	Contribution of total per cent
AfDB/GAFSP	Food and Agriculture Sector Development Project (FASDEP)	27.5	20
AfDB	Program building resilience against food and nutritional insecurity in the Sahel (P2RS)	13.0	9
EU-FAO	Millennium Development Goal 1c (Food security and Nutrition)	7.3	5
IFAD	Nema: National Land and Watershed Management and Development Project – Rice and vegetable value chains development	43.9	32
IsDB	Nema	15.0	11
World Bank	West Africa Agricultural Productivity Program (WAAPP)	13.0	9
World Bank	Commercial Agriculture and Value Chain Management Project (GCAV)	19.3	14
TOTAL		139.0	

Source: Based on IFAD 2019c, p.7; modified by PPE upon further document review and KII with various donors.

Figure 4
IFAD loan- and grant-disbursement record



Source: IFAD database (Oracle Business Intelligence).

Box 5

Comparison of cost efficiency (unit costs) with other donors (Source: World Bank)

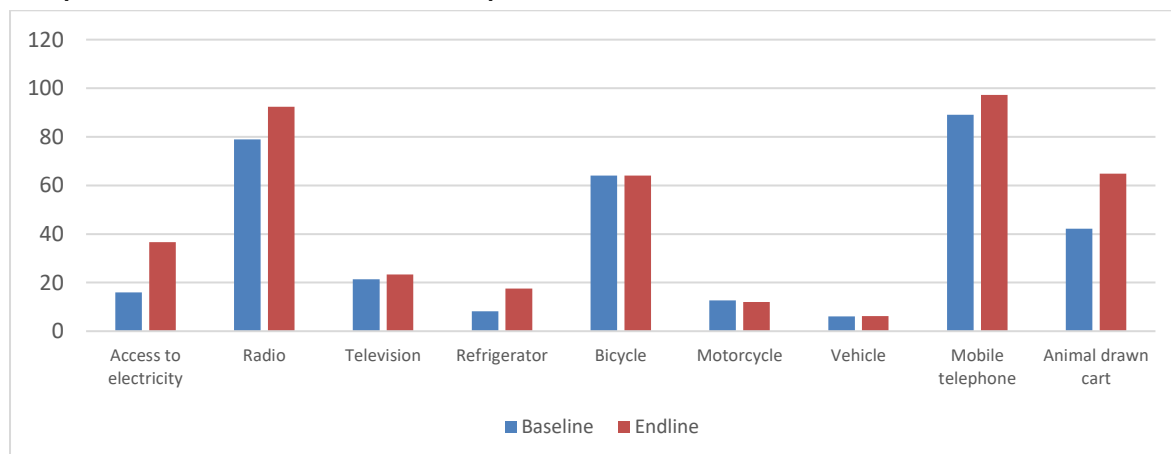
Comparisons with other projects in The Gambia show that the World Bank GCAV project was within the norms of cost efficiency. The cost per hectare for vegetable-garden equipment accrued US\$49,609, or US\$23,161 without drip-irrigation system, and the cost per hectare for rice-irrigation scheme rehabilitation amounted to US\$2,411. Two projects implemented in The Gambia conducted similar investments as GCAV – FASDEP and Nema – and are therefore used for comparison.

Vegetable gardens: FASDEP and Nema equipped vegetable gardens with water reservoirs instead of drip-irrigation systems, as done under GCAV. To compare costs between the different projects, these components are excluded. Otherwise, the components implemented differ only marginally. The investment costs per hectare under FASDEP and Nema amounted to US\$27,100 and US\$30,500 respectively (without reservoir), which compares favourably to investment costs under GCAV of US\$23,161 (without drip-irrigation system). The investment in the vegetable gardens can therefore be considered as cost efficient for these subcomponents of the irrigation system.

Rice-irrigation schemes: The costs per hectare under FASDEP and Nema cannot be directly compared to GCAV, as FASDEP invested in constructing new rice-irrigation schemes, Nema in the rehabilitation of existing irrigation schemes which needed substantial redesigning, and GCAV in the rehabilitation of existing irrigation schemes which needed no substantial redesigning. Yet, the investment costs per hectare of FASDEP and Nema, of US\$7,500 and US\$5,250 respectively, are in line with the lower investment costs under GCAV of US\$2,411. This investment can therefore equally be considered as cost efficient. Furthermore, GCAV ensured cost efficiency by building on former and ongoing Bank projects (WAAPP and GCAV), as well as existing technology such as rehabilitation of an existing rice mill.

Source: World Bank 2020.

Figure 5

Comparison of household asset ownership from baseline to endline

Source: Nema RIMS endline survey report.

Box 6

Chosso policy and institutional support for climate change adaptation

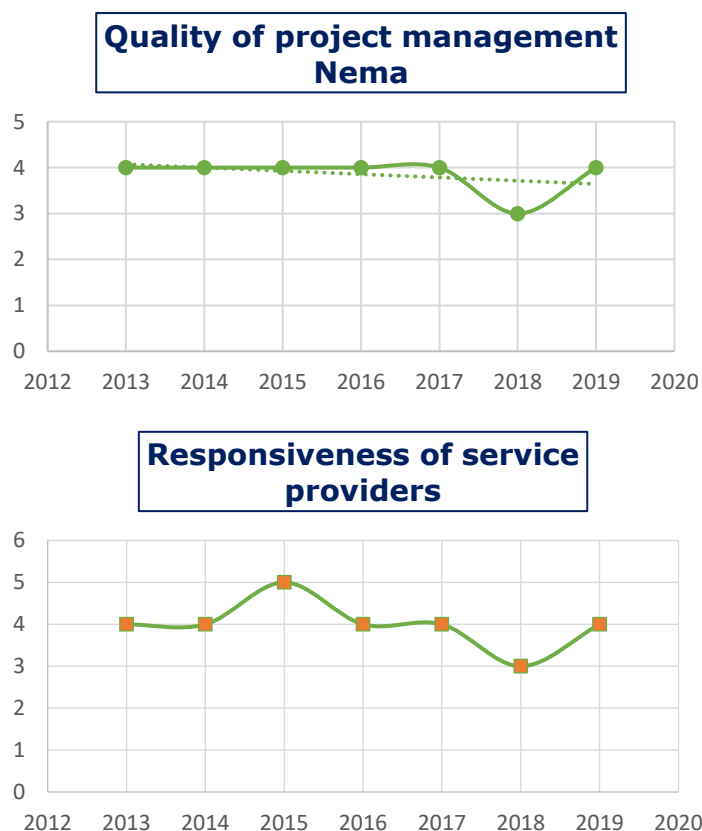
In response to a request from the Ministry of Environment, Climate Change and Natural Resources, the Nema project joined Gambia’s national delegation to attend the annual UNFCCC Conference of Parties (CoP 22 to 25). During the CoP, the delegation, usually headed by the Minister, engaged in the highest level of international dialogue for climate change and follow-up on implementation of the Paris Agreement. The Nema representative followed the proceedings of the Koronivia Joint Work on Agriculture in the face of climate change and food-security threats. The joint work specifically addressed soils, nutrient use, water, livestock, methods for assessing adaptation, and the socio-economic and food-security dimensions of climate change.

At national level, the Chosso project initiated the revival of the National Climate Change Committee in 2016 after many years of dormancy. The two-day meeting was an opportunity 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.

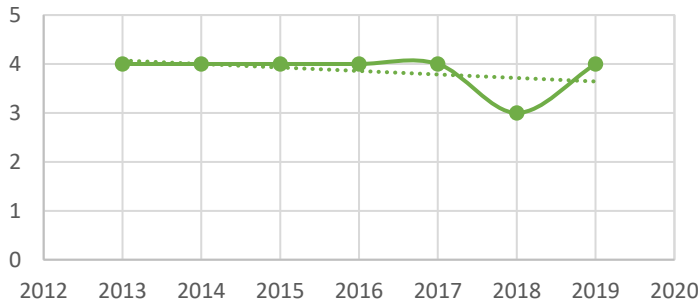
Source: (IFAD 2021b para. 100-102).

Supervision indicators

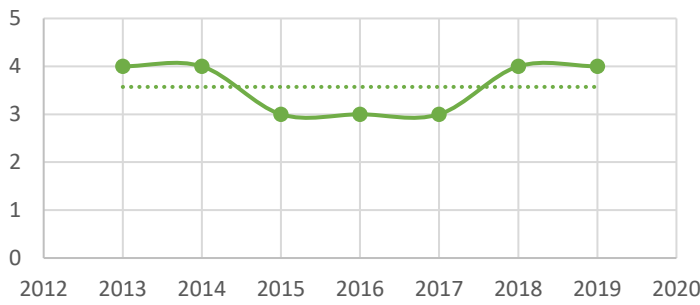
Figure 6
Supervision indicators: Operational efficiency



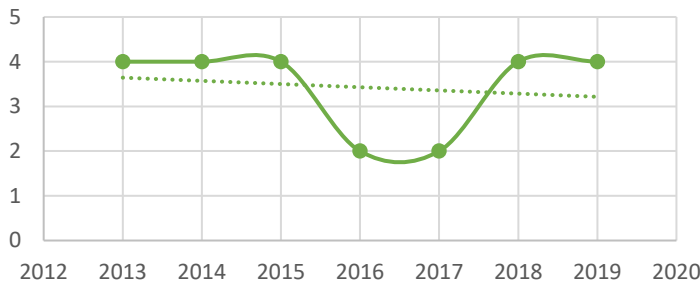
Performance of M&E system Nema



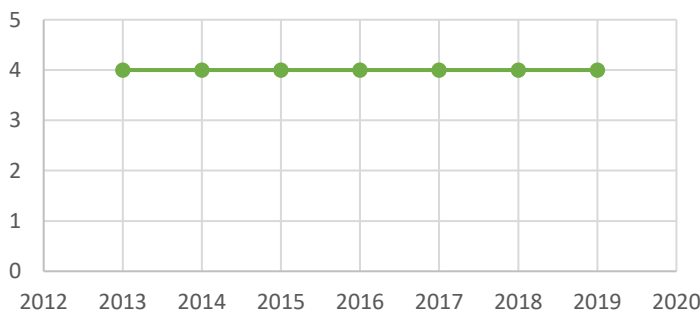
Coherence between AWPB and implementation Nema



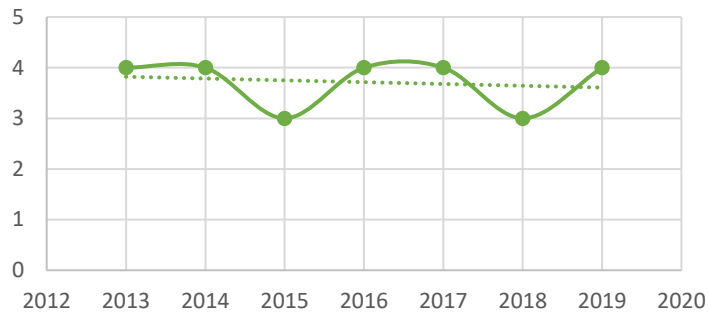
Acceptable disbursement rate Nema



Quality of financial management Nema



Procurement Nema



Quality and timeliness of audit

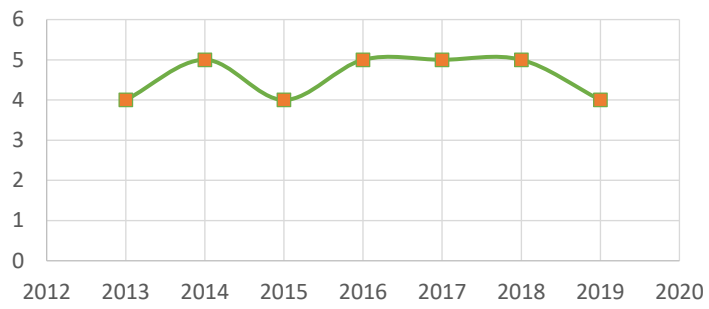
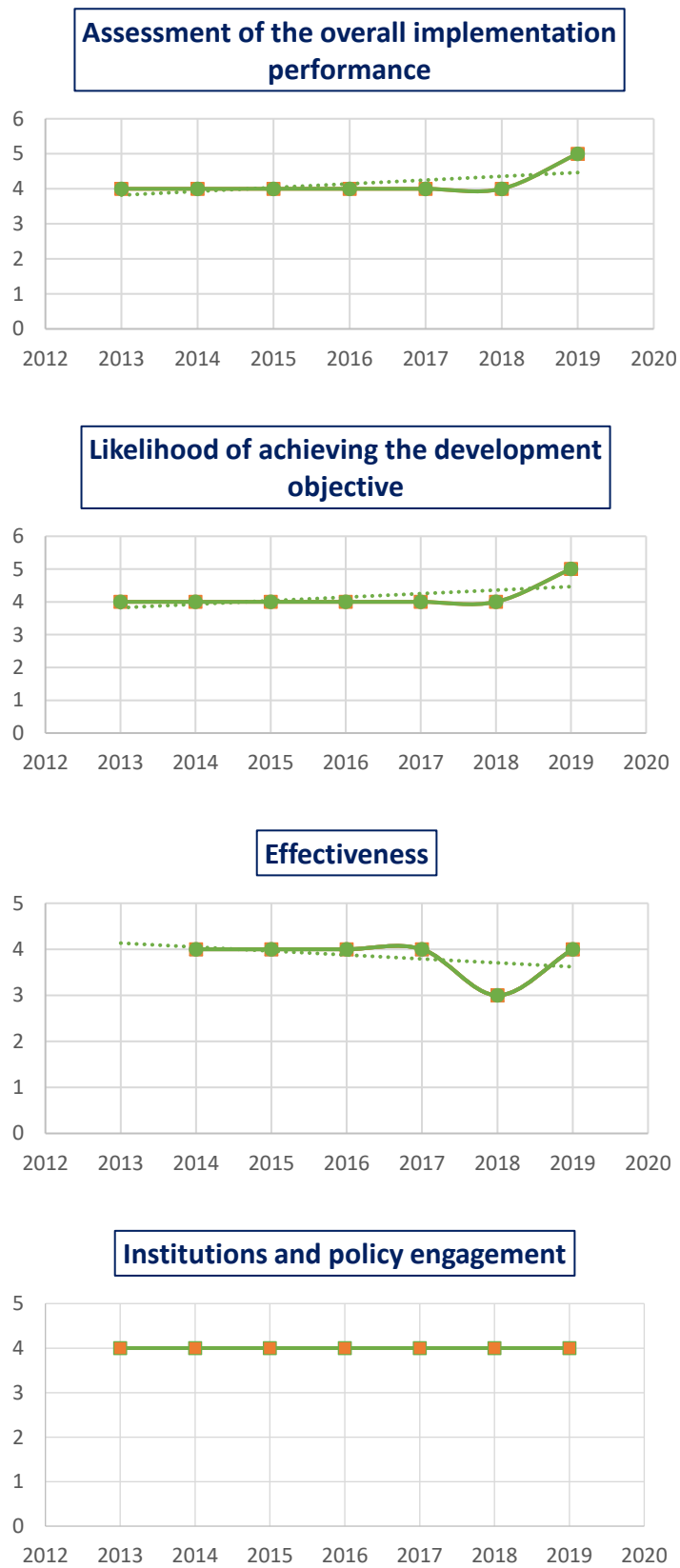
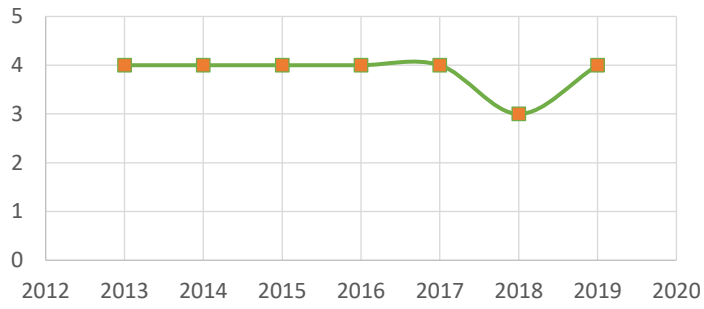


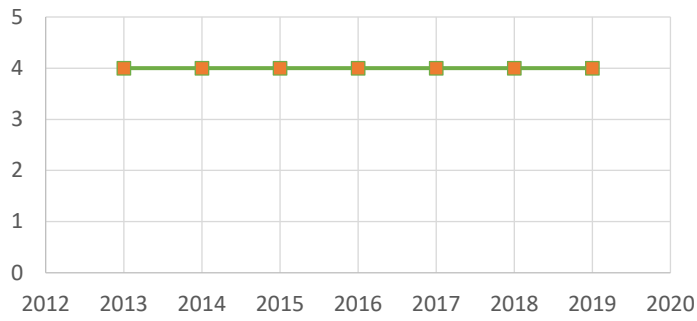
Figure 7
Supervision indicators: effectiveness and impact



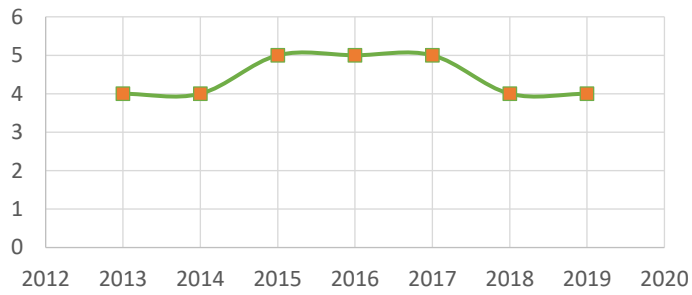
Agricultural productivity



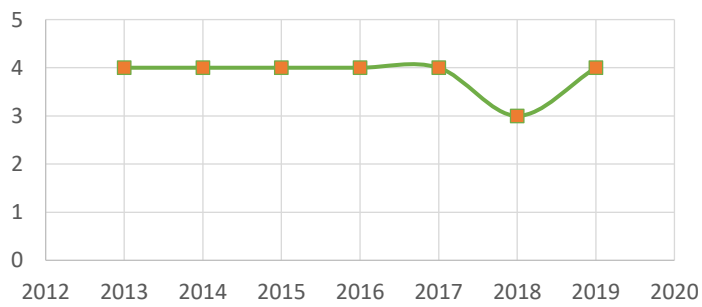
Targeting and outreach



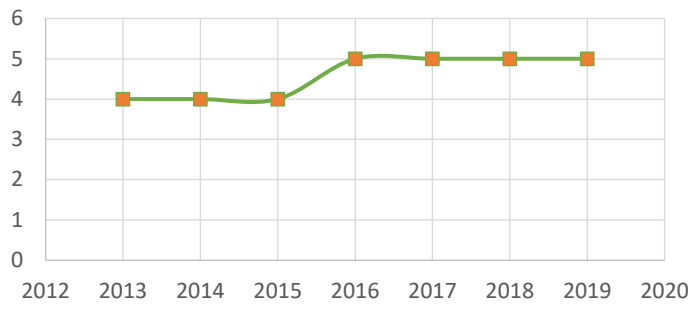
Quality of project target group engagement and feedback



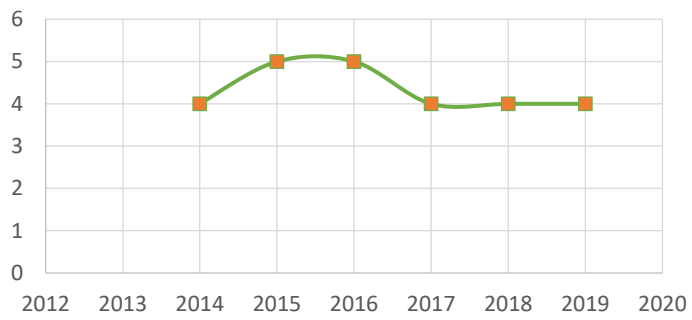
Human and social capital and empowerment



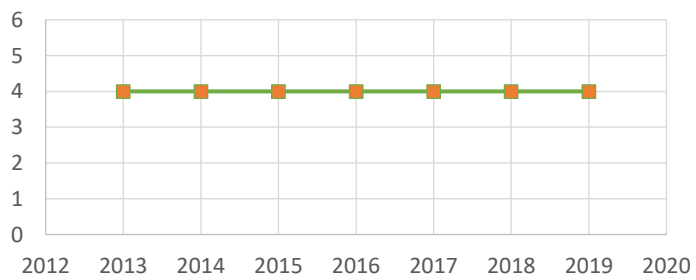
Gender equality & women's participation



Adaptation to climate change



Environment and natural resource management



Villages visited during field mission

Table 8

Villages visited during Nema PPE field trip: Performance and observations

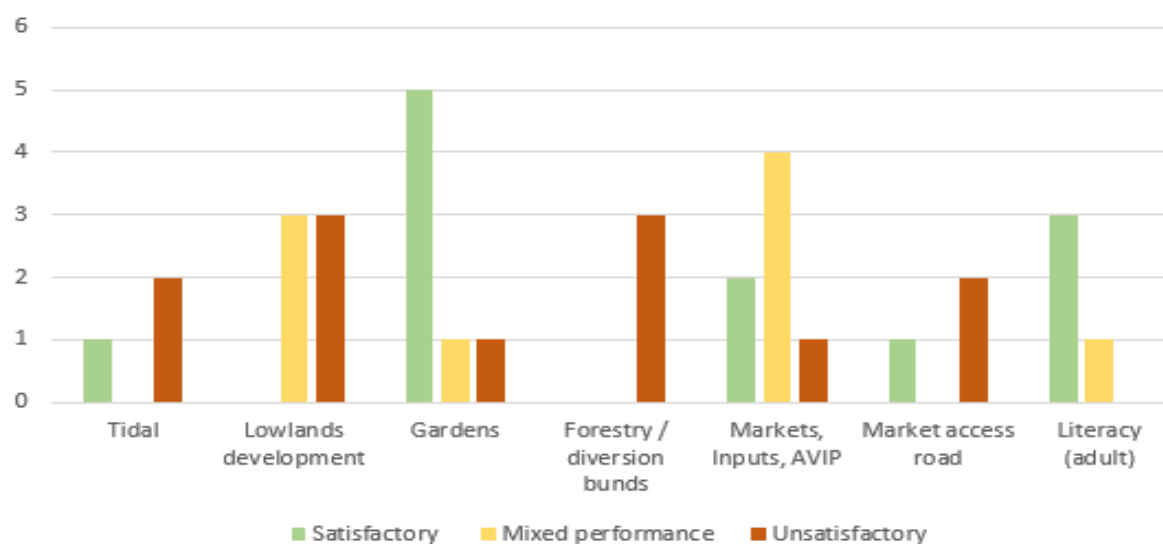
Village	Region	Main investments: infrastructure and capacity development	Rating	Observations
Darsilami Jokardou	North Bank Region	- Garden		- salty borehole, not usable - stolen solar panels
Noo Kunda	North Bank Region	- Garden (youth) - Literacy (women) - AVIP		- young woman leader - training positive - MIS so/so - but: not sufficiently consulted - but: shipping container instead of building
Barajally Suba	Central River Region/North	- Tidal irrigation		- initial consultation - rice fields being used
Kolly Kunda /Sotokoi	Central River Region/North	- Tidal irrigation		- tidal-irrigation construction came late, incomplete
Saruja	Central River Region/South	- Garden		- problems with fence-building materials/quality
Wellingara	Central River Region/South	- Seed multiplication - (Lowland/Tidal)		- seeds were bought by Nema six months late; Ministry of Finance was blamed for late payment - tidal irrigation was not done as promised
Boiram	Central River Region/South	- Lowland - Literacy (women): moderate - Market roads - AVIP/Coop - Storage - Farmer field school		- "Complete failure" in lowlands, due to faulty lowland-development planning – possibly a watershed issue - market-access roads were built but at insufficient quality - AVIP/Coop not properly working; conflicts over payments - village storage was built; processing equipment tucked away by individual in village - some positive capacity development (adult literacy, farmer field school)
Limbambulu Yamandu	Upper River Region	- Garden - Agroforestry		- but: not consulted in design - request for assistance with land distribution - [team did not discuss agroforestry]
Badari	Upper River Region	- Lowland; diversion in rice fields - Woodlot		- positive: big management committee with women and youth represented - but: poor consultation and (partially) design - agroforestry not working (c-word); missing sanctions/enforcement - woodlot was not accessible for team visit
Sabi	Upper River Region	- Diversion bunds - Agroforestry - Lowland (review again)		- diversion bunds (for village and rice fields), carried forward from PIWAMP, were destroyed by Senegalese connection road; no Nema support for local solutions (2014) - water harvesting was not implemented as planned
Darsilami (Brikamaba)	Central River Region/South	- Garden		- poor consultation in design and substandard quality of construction/material
Teneng Fara/ Sinchu Gundo	Central River Region/South	- Tidal irrigation - Access road - Storage - (Agroforestry)		- tidal irrigation incomplete and not handed over, contractor abandoned the place; worked for two seasons, but fields were flooded after canal construction; no outlet canal, no levelling

Village	Region	Main investments: infrastructure and capacity development	Rating	Observations
				<ul style="list-style-type: none"> - community advice was ignored - positive: received inputs (including tractor) and storage facility - roads were substandard - agroforestry: trained on climate-smart agriculture and importance of trees; no enforcement by department (c-word)
Kudang	Central River Region/South	<ul style="list-style-type: none"> - Lowland (wildlife fence; tidal from previous project) - Inputs/tractor - Training - Access road 		<ul style="list-style-type: none"> - tidal development was done before Nema; Nema built wildlife-protection fence (with some consultation on placing the fence) but it was destroyed by the hippos; - positive: received some inputs, seeds, fertilizer and tractor; gained money from renting out tractor - store is used for own produce, not rented out - too little consultation with community - training was done three times, including on gardening (although they don't have a garden)
Kani Kunda	Lower River Region	<ul style="list-style-type: none"> - Lowland - Literacy (women) 		<ul style="list-style-type: none"> - but: cattle problems in fields (from own village); not using them - no CCA adoption by farmers - no impact
Pakalinding	Lower River Region	<ul style="list-style-type: none"> - Garden - AVIP 		<ul style="list-style-type: none"> - good quality of Nema support - construction issues due to perennial salinity problems; need to build well on higher grounds - positive impact on beneficiaries
Toniataba	Lower River Region	<ul style="list-style-type: none"> - Lowland 		<ul style="list-style-type: none"> - very poor quality of Nema support - rice access roads very poorly done
Darsilameh	West Coast Region	<ul style="list-style-type: none"> - Garden (youth) - Literacy - AVIP 		<ul style="list-style-type: none"> - woman-led youth group - tank leaks, iron in water, but garden was functioning all right during Nema; now interest is somewhat reduced (from 3 to 2 seasons/yr) → red-flag for sustainability - contract farming not working - AVIP, yes, they are trainers for AVIP; MIS only partly working (no money for fees)
<i>Contacted, but not visited:</i>				
Karantaba	North Bank Region	<ul style="list-style-type: none"> - Woodlot 		<ul style="list-style-type: none"> - road to woodlot was not accessible
Bantunding	Upper River Region	<ul style="list-style-type: none"> - Garden - Agroforestry 		
Kartong	West Coast Region	<ul style="list-style-type: none"> - Mangroves 		<ul style="list-style-type: none"> - talked with the village chief (alkalo), but it was not possible to identify Nema contribution and site of mangrove restoration (several projects were active for that purpose in the village)

Table 9
Sample size of field visits by Nema activity type

	Total number of Nema sites	Nema sites visited	Planned site visits did not work out	Per cent visited
Lowland traditional swamp rice, water control and access	43	5		12
Tidal irrigation for rice	10	4		40
Erosion control – diversion bunds, etc.	15	2		13
Market-access roads	19	3		16
Vegetable gardens	33	8	1	24
Community woodlots	26	1	1	4
Agroforestry	44	3	1	7
Mangrove restoration	12	1	1	8
AVIPs and farmers' cooperatives	12	4		33

Figure 8
Performance of Nema infrastructure and other interventions (n = 17 field trip sites)



Traffic light ratings: overall satisfactory performance (green), overall unsatisfactory performance (red), mixed performance (yellow).

Table 10

Performance for PPE field trip sites: by village and infrastructure/intervention types

Performance summary for PPE field trip sites (# of villages; total # visited: n=17)							
	Tidal	Lowlands development	Gardens	Forestry / diversion bunds	Markets, Inputs, AVIP	Market access road	Literacy (adult)
Satisfactory	1		5		2	1	3
Mixed performance		3	1		4		1
Unsatisfactory	2	3	1	3	1	2	
Performance by village							
Satisfactory	Barajally Suba		Noo Kunda Saruja Limbanbulu Pakalinding Darsilameh (WRC)		Kudang (inputs, tractor, storage) Teneng Fara (inputs, tractor,)	Kudang	Noo Kunda Kani Kunda Darsilameh (WRC)
Mixed performance		Badari Kanikunda Kudang	Darsilameh (Brikamaba)		Darsilameh (AVIP) Noo Kunda (AVIP) Boiram (AVIP) Pakalinding (AVIP) In all cases AVIP did not introduce any major innovative mechanisms for marketing; possible exception Darsilameh, where contract farming did not work out		Boiram
Unsatisfactory	Kudang Tenengfara	Boriram Sabi Toniataba	Darsilameh (Jokardou)	Badari Sabi Tenengfara	Wellingara (seed multiplication)	Boiram Teneng Fara	

Note: Red marked villages show no acreage in PSU's EXCEL file of infrastructure by type and village

List of persons met

Government

Hassam Jallow, Permanent Secretary, Ministry of Agriculture

Amie Faburay, Ministry of Agriculture

Fatou Touray, Deputy Permanent Secretary – Programmes, Ministry of Agriculture

Modou Mbye Jabang, Permanent Secretary, Ministry of Agriculture

Landing Sonko, Director, Plant Protection Services, Department of Agriculture

Babanding Sanyang, Department of Forestry, Ministry of Environment, Climate Change & Natural Resources

Abdou Jobe, Director, Soil and Water Management Services Unit – Ministry of Agriculture

Sunkaru Badjie, Director, Department of Community Development, Ministry of Local Government & Lands

Ramata Jigo, Director, Horticultural Technical Services Unit, Ministry of Agriculture

Kansaikou Ceesay, Horticultural Technical Services Unit, Ministry of Agriculture

Francis Mendy, Director of Planning Services, Ministry of Agriculture

Momodou Sowe, Monitoring and Evaluation Officer, Ministry of Agriculture

Babanding Sanyang, Department of Forestry, Ministry of Environment, Climate Change and Natural Resources, Department of Forestry

IFAD

Haoua Sienta, Country Director, IFAD Gambia

Jean Pasca Previous, Former Country Programme Manager, IFAD Gambia

Cisse, Ibrahima Tonton, Junior Consultant/Acting Programme Analyst, IFAD Gambia

International and donor institutions

Kanimara Camara, FAO

Sambou Nget, FAO

Karikari, Tabi, AfDB

Christian Tucker, Consultant, African Development Bank

Biola Kazeem Badmos, IsDB

Non-governmental organizations and associations

Dr Mohamed Kebbeh, Executive Director, West Africa Rural Foundation

Alieu Sowe, National Coordinating Organisation of Farmer Associations of The Gambia

Musa Sowe, National Coordinating Organisation of Farmer Associations of The Gambia

Ismaila Jarjou, United Purpose

Mamadou Njie, Global Youth Innovation Network, Gambia

Contractors

Sarane Hydera, Director (Consultant/Contractor Supervisor), Mahfous

Lamin Jasseh, Lowlands Consultant, IEMC

Moi Ceesay, Director, Zen Construction

Pa Jallow, MJ Spares

Ebrima Sonko, Contractor Tidal Irrigation, Green Impact

Alieu Ceesay, Taba Ni Sita

Sossoh, Heloica Energy

Pa S. Bouvier

Kawsu Conta, FMK Drilling

Former Nema staff/ROOTS project staff

Alieu Mamour Jagne, Project Director, ROOTS

Paul Mendy, Monitoring and Evaluation Officer, ROOTS

Aji Oulaye Njie, CAS/CC and NRM officer, Former Nema/ROOTS project staff

Bakary Jammeh, Knowledge Management Officer, Former Nema staff

Ensa Colley, Monitoring and Evaluation Officer, Former Nema staff

Banki Njie, Business Development Officer, Former Nema staff

Miki Jawla, Field Coordinator, Former Nema staff

Beneficiaries

Vegetable Garden Scheme, Jokadou Darsilami, North Bank Region

Vegetable Garden Scheme, Noo Kunda, North Bank Region

Tidal Irrigation and Farmers' Cooperatives, Barajally Suba, Central River Region

Tidal Irrigation, Kolley Kunda, Central River Region

Seed Multiplication, Wellingara (CISF), Central River Region/South

Vegetable Garden Scheme, Saruja, Central River Region/South

Lowland Development, Adult literacy and Farmers' Cooperatives, Boiram, Central River Region/South

Vegetable Garden Scheme, Libambulu Yamando, Central River Region/North

Lowland Development and Community Woodlot, Badari, Upper River Region

Lowland Development, Diversion Bonds, Sabi, Upper River Region

Tidal Irrigation and Access Roads, Sinchu Gundo/Tenengfara, Central River Region/South

Lowland Causeway and Field Access Roads, Kudang, Central River Region/South

Vegetable Garden, Darsilami Brikamaba, Central River Region/South

Dike, Spillways, Road, Access Causeways and Bridges, Kanikunda, Lower River Region

Women's Garden, Pakalinding, Lower River Region

Lowland Development, Bridges and Access Roads, Toniataba, Lower River Region

Vegetable Garden Scheme, Kombo Darsilami, West Coast Region

Fieldwork itinerary

<i>Region</i>	<i>Project/partners/ stakeholders</i>	<i>Time</i>	<i>Interviewees</i>
Day 1: 28th September 2021			
North bank region	Vegetable Garden Scheme - Jokadou Darsilami	1415 to 1645	Focus group discussion with project beneficiaries
North Bank Region	Vegetable garden scheme, Noo Kunda village	1715 to 1930	Focus group discussion with project beneficiaries
Day 2: 29 th September 2021			
Central River Region (North)	Tidal Irrigation – (25 hectares perimeter) and Farmers' Cooperatives -Barajally Suba	14 00 to 1600	Focus group discussion with project beneficiaries
Central River Region (North)	Tidal irrigation - Kolley Kunda	17 00 to 1900	Focus group discussion with project beneficiaries
30 th September 2021			
Central River Region/South	Seed Multiplication, CISF – Wellingara village	1130 to 1345	Focus group discussion with project beneficiaries
Central River Region/ South	Vegetable garden scheme - Saruja	1400 to 1600	Focus group discussion with project beneficiaries
Central River Region (South)	Lowland Development, Adult literacy and Farmers' Cooperatives – Boiram village	1630 to 1900	Focus group discussion with project beneficiaries
1 st October 2021			
Central River North	Vegetable garden scheme - Libambulu Yamando village	1300 to 1400	Focus group discussion with project beneficiaries
Upper River Region	Lowland Development and Community Woodlot – Badari village	1615 to 1730	Focus group discussion with project beneficiaries
Upper River Region	Lowland Development, Diversion Bonds – Sabi village	1800 to 1900	Focus group discussion with project beneficiaries
2 nd October 2021			
Central River Region (South)	Tidal Irrigation – (56 hectares perimeter) and Access Roads - Sinchu Gundo/Tenengfara villages	1215 to 1400	Focus group discussion with project beneficiaries
Central River Region south	Vegetable garden - Darsilami Brikamaba village	1430 to 1630	Focus group discussion with project beneficiaries
3 rd October 2021			
Central River Region (South)	Lowland Causeway and Field Access Roads – Kudang village	1315 to 1500	Focus group discussion with project beneficiaries
Lower River Region	Dike, Spillways, Road, Access Causeways and Bridges – Kanikunda village	1615 to 1830	Focus group discussion with project beneficiaries
Lower River Region	Women's vegetable garden - Pakalinding	1130 to 1345	Focus group discussion with project beneficiaries
4 th October			
4 th October 2021			

Annex IX

Lower River Region	Lowland Development, Bridges and Access Roads – Toniataba village	1400 to 1615	Focus group discussion with project beneficiaries
5 th October 2021			
West Coast Region	Vegetable garden scheme (Youth) - Kombo Darsilami	1330 to 1630	Focus group discussion with project beneficiaries

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