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OFFICE OF EVALUATION AND INTERNAL OVERSIGHT

INDEPENDENT TERMINAL EVALUATION

REPUBLIC OF SENEGAL

AGRICULTURAL VALUE CHAINS RESILIENCE SUPPORT PROJECT  
(PARFA) IN THE REPUBLIC OF SENEGAL

UNIDO PROJECT ID: 150071  
GEF PROJECT ID: 9134



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The Evaluation Team hopes that the findings, conclusions and recommendations will contribute to the successful completion of the Project and to the continuous improvement of similar projects in other countries.

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## ABBREVIATIONS AND ACRONYMS

Acronym	Meaning
ANER	Agence Nationale d'Énergies Renouvelables
AVSF	Agronomes et Vétérinaires sans Frontières
CPM	Country programme Manager
CSA	Commissariat à la Sécurité Alimentaire
CSE	Centre de Suivi Écologique
DBRLA	Direction of Retention Ponds and Artificial Lakes
FO	Farmers' organization
GDP	Gross Domestic Product
GEF	Global Environment Fund
IAP	Integrated Approach Pilot
IED Afrique	Innovation, Environnement, Développement Afrique
IFAD	International Fund for Agricultural Development
INP	Institut National de Pédologie
IPCC	International Panel on Climate Change
ITA	Institut de Technologies Alimentaires
MAER	Ministry of Agriculture and Rural Equipment
M&E	Monitoring and Evaluation
MSREs	Micro- and small rural enterprises
NGO	Non-governmental organization
OFOR	Office des Forages Rurales
PAFA	Agricultural Value Chains Support Project
PAFA-E	Agricultural Value Chains Support Project Extension
PARFA	Agricultural Value Chains Resilience Support Project
PCR	Project Completion Report
PCRV	Project Completion Report Validation
RBM	Results Based Management
SLM	Sustainable land management
SSA	Sub-Saharan Africa
tCO <sub>2</sub> e	Ton of carbon dioxide equivalent
TE	Terminal evaluation
TOC	Theory of change

<b>Acronym</b>	<b>Meaning</b>
TORs	Terms of reference
UNIDO	United Nations Industrial Development Organisation
WO	Women's organization

## GLOSSARY OF EVALUATION-RELATED TERMS

Term	Definition
Baseline	The situation, prior to an intervention, against which progress can be assessed.
Effect	Intended or unintended change due directly or indirectly to an intervention.
Effectiveness	The extent to which the development intervention's objectives were achieved, or are expected to be achieved.
Efficiency	A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results.
Impact	Positive and negative, intended and non-intended, directly and indirectly, long term effects produced by a development intervention.
Indicator	Quantitative or qualitative factors that provide a means to measure the changes caused by an intervention.
Lessons learned	Generalizations based on evaluation experiences that abstract from the specific circumstances to broader situations.
Logframe (logical framework approach)	Management tool used to facilitate the planning, implementation and evaluation of an intervention. It involves identifying strategic elements (activities, outputs, outcome, and impact) and their causal relationships, indicators, and assumptions that may affect success or failure. Based on RBM (results-based management) principles.
Outcome	The likely or achieved (short-term and/or medium-term) effects of an intervention's outputs.
Outputs	The products, capital goods and services which result from an intervention; may also include changes resulting from the intervention which are relevant to the achievement of outcomes.
Relevance	The extent to which the objectives of an intervention are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donor's policies.
Risks	Factors, normally outside the scope of an intervention, which may affect the achievement of an intervention's objectives.
Sustainability	The continuation of benefits from an intervention, after the development assistance has been completed.
Target groups	The specific individuals or organizations for whose benefit an intervention is undertaken.

## EXECUTIVE SUMMARY

The purpose of this Terminal Evaluation (TE) was to independently assess the Agricultural Value Chains Resilience Support Project (PARFA) in Senegal to help UNIDO improve performance and results of ongoing and future programmes and projects. The terminal evaluation (TE) covers the whole duration of the project from its starting date in March 2017<sup>1</sup> to the completion date in June 2022. It also assesses the Agricultural Value Chain Support Extension Project (PAFA-E) project funded by the International Fund for Agricultural Development (IFAD), which was the baseline investment and partially counted as a co-financing source for PARFA. Consequently, IFAD was another implementing agency for the GEF- funded PARFA.

The evaluation had two specific objectives:

- (i) Assess the project performance in terms of relevance, effectiveness, efficiency, sustainability, coherence, and progress to impact; and
- (ii) Develop a series of findings, lessons and recommendations for enhancing the design of new and implementation of ongoing projects by UNIDO.

The TE of PARFA followed the UNIDO Evaluation Manual regarding the sequencing, evaluation criteria and guiding questions. An evaluation framework was established, building on the evaluation Terms of Reference (TORs) and detailing guiding questions.

The TE has, and PARFA itself, faced several challenges:

- A considerable limitation of the TE exercise was the difficulty in obtaining the feedback of project stakeholders in Senegal, foremost government representatives, and also the travel restrictions due to the Covid-19 pandemic. Thus, the bulk of evaluation insight was obtained from desk reviews and visits to all relevant project sites and beneficiary groups by the national evaluation consultant together with the UNIDO national coordinator.
- The multi-stakeholder structure of PAFA-E, differing timelines between the baseline investment and the GEF grant execution, and management problems inherent to PAFA-E were additional features complicating the TE.
- On top of reporting routines related to the baseline investment project (PAFA-E), the Government of Senegal, IFAD and UNIDO issued separate reports related to PARFA at different points in time, which made a comprehensive assessment difficult.

The key findings and conclusions of this TE are:

- PARFA was a relevant undertaking, following a value-addition path typical for GEF grants. It responded to global environmental concerns, which were explicitly put in relation with the environmental and climate change-relevant outputs of PARFA while coherently reinforcing the value chain promotion thrust inherent to the IFAD-funded PAFA-E. The project was also relevant for the national policy framework and for IFAD's and UNIDO'S strategies. The GEF design carefully took into account the needs of the rural population considered in the project area, and proposed a comprehensive strategy to address the constraints against the resilience of agricultural valued chains.
- In practice, this comprehensive strategy may have been too complex and not sufficiently led by tactical selectivity, focusing on interventions that could have matured benefits more rapidly, e.g., interventions requiring less civil engineering at scale and more grassroots involvement of farmers' and women's organizations (FOs and WOs).

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<sup>1</sup> See Table 1.



- Effectiveness was partly constrained by the ambitious design, i.e., no tangible achievement was achieved under Component 3 (monitoring and evaluation of environmental impact and of project results), which was under the responsibility of the Monitoring and Evaluation (M&E) staff of PAFA-E and Centre de Suivi Écologique (CSE). Components 1 and 2 (support to multi-stakeholder platforms and upscaling of sustainable and resilient good practices, respectively) were effective, and progress to impact moderately satisfactory. As a matter of fact, PARFA overshot the CO2 emission reduction targets, both related to mangrove rehabilitation and to the introduction of solar energy for irrigation and food processing.
- Efficiency is also assessed as satisfactory, while gender mainstreaming is rated as moderately satisfactory. Sustainability may be constrained by the absence of a monitoring and evaluation system of environmental impact (Component 3). By and large, the performance of partners is in the satisfactory range. The only moderately unsatisfactory rating refers to result-based management, which is not perceptible when assessing the overall management performance.

### Rating summary

#	<u>Evaluation criteria</u>	<u>Mandatory rating</u>
<b>A</b>	<b>Progress to impact</b>	<b>4</b>
<b>B</b>	<b>Project design</b>	<b>4</b>
1	1. Overall design	4
2	2. Logframe	4
<b>C</b>	<b>Project performance</b>	<b>4</b>
1	3. Relevance	5
2	4. Effectiveness	4
3	5. Coherence	4
4	6. Efficiency	5
5	7. Sustainability of benefits	4
<b>D</b>	<b>Cross-cutting performance criteria</b>	<b>4</b>
1	8. Gender mainstreaming	4
2	9.1 M&E design 9.2 M&E implementation	4 3
3	10. Results-based Management (RBM)	3
<b>E</b>	<b>Performance of partners</b>	<b>5</b>
1	11. UNIDO, IFAD	5 and 4, respectively
2	12. National counterparts	5
3	13. Donor	4
<b>F</b>	<b>Overall assessment</b>	<b>4</b>

## RÉSUMÉ (FRENCH)

Le but de l'évaluation finale a été d'apprécier de façon indépendante le « Projet d'Appui à la Résilience de Filières Agricoles » (PARFA) au Sénégal dans le but d'assister l'ONUDI à améliorer la performance et les résultats de ses projets en cours et futurs. L'évaluation finale couvre toute la durée du projet de Mars 2017 jusqu'à juin 2022. L'évaluation inclut aussi le « Projet d'Appui aux Filières Agricoles – Extension » (PAFA-E) financé par le Fonds International pour le Développement Agricole (FIDA) qui était l'investissement de base pour le PARFA. Par conséquent, le FIDA était une autre agence d'exécution du don du Fonds Environnemental Mondial (FEM).

L'évaluation avait deux objectifs spécifiques :

- (i) Apprécier la performance du projet en termes de pertinence, efficacité, efficience, durabilité, cohérence et progrès vers des impacts,
- (ii) Développer une série de conclusions, leçons et recommandations pour améliorer la planification de nouveaux projets et la réalisation de projets en cours de l'ONUDI.

L'évaluation du PARFA a suivi le manuel d'évaluation de l'ONUDI en ce qui concerne le séquençage, les critères d'évaluation et les questions directrices. Une matrice d'évaluation fut développée, basée sur les termes de référence et en détaillant les questions directrices.

L'évaluation finale, et le PARFA lui-même, ont été confrontés à plusieurs défis :

- Une limitation considérable de l'évaluation a été la difficulté à obtenir des retours d'information de la part des acteurs au Sénégal, notamment de la part de représentants du Gouvernement, ainsi que les restrictions de voyage imposées par la pandémie Covid-19. Ainsi, le gros des informations fut obtenu par des analyses documentaires et des visites des sites pertinents du projet et des groupes bénéficiaires par le consultant national d'évaluation et le coordonnateur national de l'ONUDI.
- La structure du PARFA englobant une multitude d'acteurs, les durées et délais d'exécution différents entre l'investissement de base et la réalisation du don du FEM, et des problèmes de gestion inhérent au PAFA-E, étaient des défis additionnels.
- En deçà de routines de rapportage relatifs au PAFA-E, le Gouvernement du Sénégal, le FIDA et l'ONUDI ont rédigé des rapports séparés concernant le PARFA à des moments différents au cours de l'exécution du projet ce qui a rendu difficile de recueillir une vue d'ensemble.

Les conclusions principales de l'évaluation finale sont :

- PARFA était un projet pertinent, suivant un parcours de valeur ajoutée typique pour des dons du FEM. Il répondait à des préoccupations environnementales globales qui ont été explicitement mises en relation avec les produits d'ordre écologique et de changement climatique du PARFA, tout en renforçant de façon cohérente l'orientation vers des filières agricoles du PAFA-E financé par le FIDA. Le projet était aussi pertinent en ce qui concerne les cadres des politiques nationales et conséquent vis-à-vis des stratégies du FIDA et de l'ONUDI. La planification du don du FEM a soigneusement pris en compte les besoins des populations dans les zones du projet. Il a proposé une stratégie complète pour affronter les limitations à la résilience des filières agricoles.
- En pratique, cette stratégie complète a probablement été trop complexe et pas suffisamment marquée par une sélectivité tactique, en mettant l'accent sur des interventions qui auraient permis de recueillir des bénéfices plus rapidement, par

exemple en réduisant des interventions nécessitant de l'ingénierie civile à échelle et en privilégiant la participation d'organisations paysannes et de femmes.

- L'efficacité du PARFA était partiellement limitée par l'envergure ambitieuse de l'opération. Ainsi, aucun résultat concret a été produit dans la Composante 3 (suivi de l'impact environnemental et des résultats du projet) qui était sous la responsabilité du chargé de suivi & évaluation du PAFA-E et du Centre de Suivi Écologique (CSE). Les Composantes 1 et 2 (appui aux plateformes multi-acteurs et mise à échelle de bonnes pratiques résilientes, respectivement) ont été efficaces, et le progrès vers des impacts modérément satisfaisant. En réalité, PARFA a dépassé les cibles de réduction d'émission de CO<sub>2</sub>, résultats de la réhabilitation de mangroves et de l'introduction d'énergie solaire pour le pompage d'eau et la transformation d'aliments.

## DES ANNOTATIONS (FRENCH)

#	Critères d'évaluation	Annotations
<b>A</b>	<b>Progrès verdes impacts</b>	<b>4</b>
<b>B</b>	<b>Conception du projet</b>	<b>4</b>
1	1. Conception générale	4
2	2. Cadre logique	4
<b>C</b>	<b>Performance du projet</b>	<b>4</b>
1	3. Pertinence	5
2	4. Efficacité	4
3	5. Cohérence	4
4	6. Efficience	5
5	7. Durabilité des bénéfices	4
<b>D</b>	<b>Critères de performance transversaux</b>	<b>4</b>
1	8. Mise à échelle d'aspects de genre	4
2	9.1 Conception du système de suivi & évaluation 9.2 Réalisation du suivi & évaluation	4 3
3	10. Gestion basée sur des résultats	3
<b>E</b>	<b>Performance de partenaires</b>	<b>5</b>
1	11. UNIDO, IFAD	5 et 4, respectivement
2	12. Homologues nationaux	5
3	13. Donateur	4
<b>F</b>	<b>Appréciation globale</b>	<b>4</b>

## 1. Introduction

### 1.1 Evaluation objectives and scope

This is the report of the terminal evaluation (TE) of the Agricultural Value Chain Support Project (PARFA) in Senegal. The purpose of the evaluation is to independently assess the project to help UNIDO improve performance and results of ongoing and future programmes and projects. The terminal evaluation (TE) covers the whole duration of the project from its starting date in March 2017<sup>2</sup> to the completion date in June 2022. It also covers the assessment of the project implemented by the International Fund for Agricultural Development (IFAD) who is another implementing agency for this project.

The evaluation had two specific objectives:

- (iii) Assess the project performance in terms of relevance, effectiveness, efficiency, sustainability, coherence, and progress to impact; and
- (iv) Develop a series of findings, lessons and recommendations for enhancing the design of new and implementation of ongoing projects by UNIDO.

The senior evaluation consultant and team leader was Mr Ernst Schaltegger, who directed the TE in a remote mode, due to the Covid-19 travel restrictions. He was assisted by Mr Abdoulaye Diarra who acted as national consultant and visited the project areas in Senegal.

### 1.2 Overview of the project context

The objective of PARFA was *“increasing sustainability and resilience of agriculture and value chains for an enhanced food security in Senegal”*.<sup>3</sup> <sup>4</sup>The project focused on *mitigation of impacts and adaptation to Climate Change (CC)*, including: (i) the realization of different types of catchment water facilities appropriate to the physical and socioeconomic contexts in order to allow for a better economy of surface water and shallow groundwater during the more random rainy seasons or very long dry periods; (ii) the implementation of sustainable land management (SLM) practices at production plots; (iii) the promotion of renewable energy; (iv) improving storage techniques and enhancement of agricultural products; (v) the realization of measures to raise awareness and education on environmental issues and climate risk reduction; (vi) a contribution to the monitoring and operation of climate data in the project area, and (vii) the capitalization and dissemination of the acquired experience in the field of resilience to CC.

According to the cited project document, Senegal covers 196,722 km<sup>2</sup> and had, at the time of project design, an estimated population of 14.54 million people, with a demographic growth rate of 2.9 % in 2014.<sup>5</sup> Senegal had been facing a low rate of growth over the last decade; during the 2006- 2014 period, of only 3.4 % while that of the whole of Sub-Saharan Africa averaged 6 %. The weak economic performance of the country is due to the importance of the agricultural sector, an unfavourable climate for investment and business (weak governance and lack of infrastructure and human resources) and a loss of competitiveness. The agricultural sector employed around 55 % of the active population and contributed up to 8 % of GDP. The growth rate of agricultural production, which was only 2.7 % from 1981 to 1995, was slightly less than the demographic growth rate (2.9%) and continued to decrease.

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<sup>2</sup> See Table 1.

<sup>3</sup> GEF. Agricultural Value Chains Resilience Support Project (PARFA), Project document (GEF-6 REQUEST FOR PROJECT ENDORSEMENT/APPROVAL, GEF Project ID: 9134, UNIDO 150071. Submission date: 27 June 2016).

<sup>4</sup> FIDA, UNIDO. Agricultural Value Chains Resilience Support Project (PARFA), Detailed Design Report, Main Report and Annexes, September 2015 (mission date), document not dated.

<sup>5</sup> World Bank. World Development Indicators 2015.

Livestock farming, the second economic activity pole of the primary sector (4.3% of GDP in 2011), practised by 350,000 families is characterized by an estimated 15.35 million heads in 2011, predominantly sheep (37.4%), followed by goats (31.9%) and cattle (21.9%). The livestock sector, marked by traditional pastoral and agro-pastoral systems, is facing two major challenges: the securing of pastoral livestock farming and the emergence of new type of farms that are well adapted to market realities.

According to the project document, inappropriate agricultural practices, overexploitation of forests, strong human pressure, climate variability and climate change impacts exert strong pressure on the natural resources, leading to ecosystem and land degradation, with the development of the phenomena of land salinization and acidification. The Sudano-Sahelian type of climate is characterized by the alternation between the dry season, from November to May, and the rainy season from June to October. The analysis of climate data over the last ten years (2005-2014) in the project area shows: (i) a decline in rainfall, which varies from region to region from 0 to 9 mm /year; and (ii) a drop-in temperature, which varies from 0.1 to 0.25°C over ten years. The temperature analysis shows a 30-year increase in temperature, from about 0.1 to 0.5°C per decade in the PARFA area.

The climate projections indicate a positive gradient for temperature (warming) ranging from 0.8 to 1.1°C (sensitivity of 1.5°C) to 1.5-2.2°C (sensitivity to 3.5°C). Projections show two areas where the increase in temperature in the west will remain lower than that projected in the east. Regarding rainfall, the south will become drier than the north regardless of sensitivity. The effects of climate change will lead to increased salinization (especially in the groundnut basin), flooding of low-lying coastal areas (mangroves) and salinization of the groundwater. This will result in an acceleration of the *tanne* (salt flat) formation process, thus reducing the availability of arable land.<sup>6</sup>

The PARFA project area was identical to the one of the “Agricultural Value Chains Support Project – Extension” (PAFA-E), a USD 34.7 million project funded by IFAD and considered as the co-financing of the PARFA, and covered: (i) the central and northern groundnut basin, encompassing the regions of Kaolack, Fatick, Kaffrine and Diourbel; and (ii) the Louga agro-pastoral region. The project zone represents 27 % of the country’s land area and is home to 35 % of its population. The direct target population of PARFA was estimated at 5,250 households thus representing about 10% of the PAFA-E beneficiaries. PARFA targeted beneficiary groups of which: (i) smallholder farmers and herders who were members of farmers’ and herders’ organizations, within which it was to ensure the incorporation of the most vulnerable households, the young, and women and their organizations, (ii) other economic actors: micro- and small rural enterprises (MSREs) providing services, for preference those run by young people, both upstream and downstream of the value chains in question, (iii) market operators, (iv) public and private structures providing the products and services needed for development of the targeted value chains. Map 1 below shows the regions which PARFA (and PAFA-E) covered. Table 1 thereafter displays the project factsheet with key project data.

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<sup>6</sup> Rapport National sur le Développement Humain au Sénégal (2009).

# Map1: Project deployment regions

## Senegal

### Agricultural Value Chains Support Project – Extension

President's report



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 | 27-01-2016

**Table 1: Project factsheet**

Project title	Agricultural Value Chains Resilience Support Project (PARFA)
UNIDO ID	150071
GEF Project ID	9134
Country(ies)	Senegal
Project donor(s)	GEF
Project approval date/GEF CEO endorsement date	3 December 2016
Actual project start date (First PAD issuance date)	7 October 2014 7 March 2017
Actual project completion date (as indicated in UNIDO ERP system)	30 June 2022
Project duration (year): Planned: Actual:	48 months 63 months
GEF Focal Areas and Operational Programme	Land Degradation (LD) Climate Change (CC) IAP-Set aside
Implementing agency(ies)	IFAD, UNIDO
Government coordinating agency	Ministry of Agriculture and Rural Equipment ; Institut de technologie alimentaire (ITA, Institute of Food Technology); Le Commissariat à la sécurité alimentaire (CSA); Direction of retention ponds and artificial lakes-DBRLA); L'Institut national de pédologie (INP); Le Centre de suivi écologique (CSE); <sup>7</sup> Direction of water and forestry, Direction of environment and classified establishments(DEEC)
Donor funding	USD 7,219,450
UNIDO input (in kind, USD)	USD 319,700
Co-financing at CEO Endorsement, as applicable	USD 28,544,133
Total project cost (USD), excluding support costs	USD 35,763,583
Mid-term review date	Apr-May 2018
Planned terminal evaluation date	December 2021- April 2022

(Source: Project document, UNIDO ERP system)

### 1.3 Theory of Change (TOC)

PAFA-E, the “Agricultural Value Chains Support Project – Extension” (PAFA-E; 2014-2020), funded by IFAD, was considered to be the so-called “baseline investment” for PARFA. The Theory of Change (TOC) elaborated in the framework of this TE therefore visualizes the logics of both undertakings, plus the overarching relations with the (i) *contributions to global environmental benefits (GEF)*, (ii) *the Integrated Approach Programme (IAP; GEF – IFAD - UNIDO)* and (iii) *the Programme for Country Partnerships - PCP (UNIDO)*, for which Senegal was designated as a pilot country.

The TOC shown requires some explanations:

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<sup>7</sup> The « Office for Well Drilling » (OFOR) and the “Agronomists and Veterinarians without Borders” (AVSF) have been targeted in the project document, but were replaced by private companies: OFOR was not working in the field of small scale irrigation and AVSF was preferring a more costly type of biodigesters.

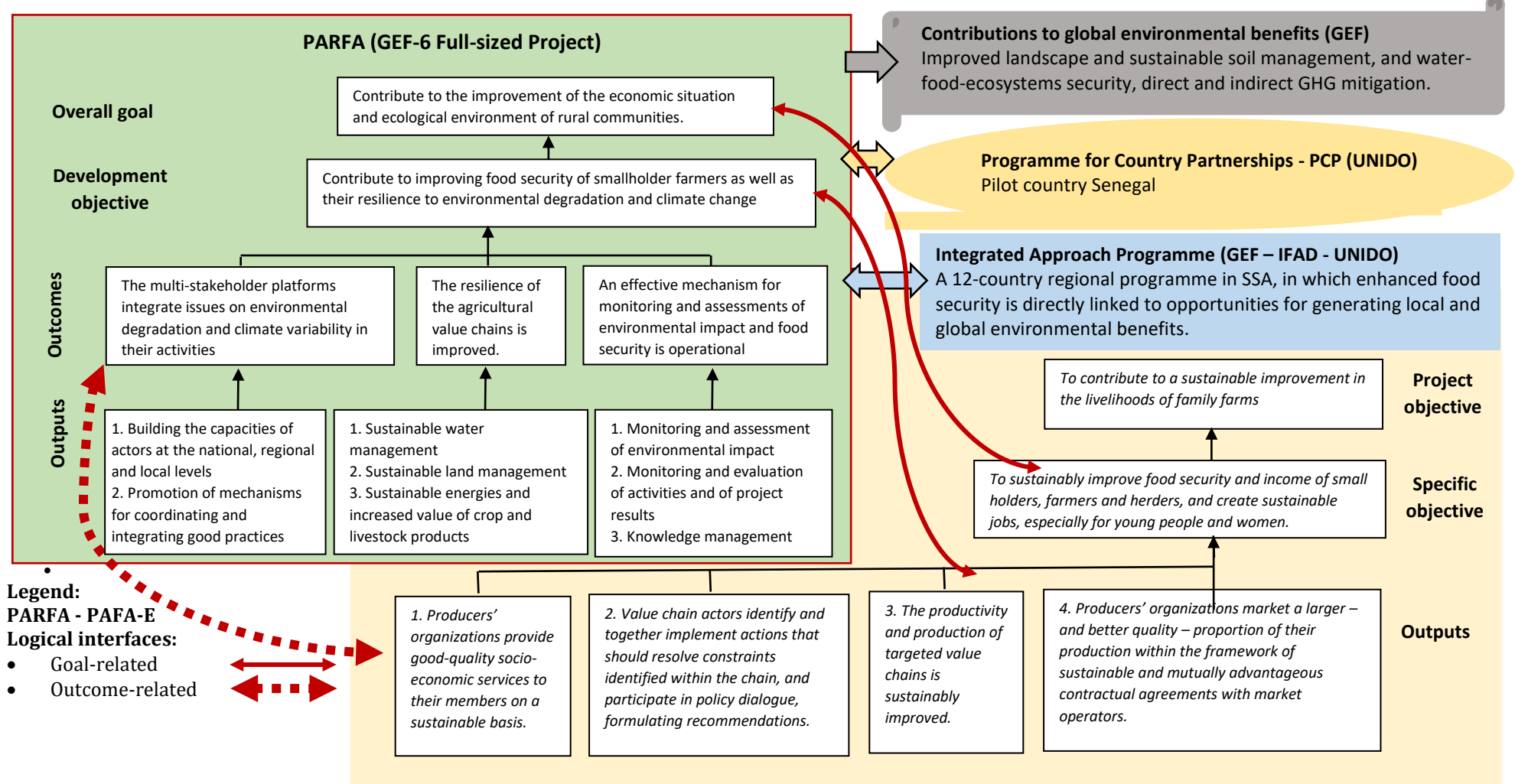


- The mentioned overarching relations are relevant in the sense that they are explicitly referred to in the related documentation:
  - The contributions of PARFA to global environmental benefits are quantified in the Project document and again referred to below in terms of effective magnitude attained, see Section 3.2 under “Progress towards impact”.
  - PARFA was consistent with the aim of IAP in that the Project indeed targeted agro-ecological systems where the need to enhance food security was directly linked to opportunities for generating local and global environmental benefits.<sup>8</sup>
  - Finally, the PCP UNIDO-Senegal pilot project has made progress since 2017. The “Agropole Centre” in Kaolack is operational and can build on the close to 5,000 beneficiary households of PARFA. The pertinence of PARFA is particularly evident for the “Integrated and Competitive Agropoles “, see also Section 4.2 Relevance”. These beneficiary households form a pool of potential suppliers and stakeholders for the Agropole Centre and are relevant for its horizontal axes “Business Environment”, “Upgrading of Actors”, “seed Capital, “Access to Credit”, and “Governance”.
- Between the baseline investment (PAFA-E) and the value addition (PARFA), direct interfaces are visualized at the higher levels of the TOC, involving the goals of both PAFA-E and of PARFA.
- The project and specific objective of PAFA-E are roughly congruent with both the overall goal and development objective of PARFA. It is obvious that the PARFA development objective is more explicit in that it targets *“food security of smallholder farmers as well as their resilience to environmental degradation and climate change”*. This dimension can be considered as the essential value addition of PARFA with relation to the baseline investment PAFA-E.
- More importantly, the visualized interface between the producers’ organizations providing good quality socioeconomic services of PAFA-E (output level) and the multi-stakeholders’ platforms of PARFA integrating issues on environmental degradation and climate variability were instrumental for PARFA’ s outreach: without the baseline investment of PAFA-E, it would have been impossible to reach close to 5,000 direct beneficiaries.

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<sup>8</sup> UNIDO, IFAD. Senegal, PARFA – IAP Factsheet, September 2016

## Synopsis 1: PARFA – PAFA-E: Ex-post theory of change, logical interfaces and overarching relations



## 1.4 Evaluation Methodology

The PARFA TE followed the UNIDO Evaluation Manual<sup>9</sup> regarding the sequencing, evaluation criteria and guiding questions. The evaluation framework in Annex 2 details TOR-derived and proposed, additional, guiding questions. In particular, the evaluation methodology was conditioned by the specificity of PARFA, i.e., a GEF additional investment on an existing project implemented by the Government of Senegal and IFAD. The section below not only highlights limitations of the evaluation but also inherent challenges due to project architecture and timelines.

## 1.5 Limitations of the Evaluation

### a. Project scope and related definitions

PARFA was an ambitious undertaking aiming at *sustainability and resilience of both agriculture and value chains, and enhanced food security*. In addition, the agenda of action was broad, covering subject areas of water, soil, forestry, energy and post-harvest management. It also explicitly included awareness raising and education of the beneficiary population as well as climate data monitoring and knowledge management. For environment and climate-relevant terms, Box 1 below displays the definitions used in this TE.

#### Box 1: Definitions of key PARFA terminology.

The GEF request for project endorsement/approval does not define climate change adaptation or resilience. However, this evaluation uses the definitions of sustainability, climate change mitigation and adaptation, and resilience established by the International Panel on Climate Change (IPCC), following GEF's practice:

**Adaptation:** In *human systems*, the process of adjustment to actual or expected *climate* and its effects, in order to moderate harm or exploit beneficial opportunities. In *natural systems*, the process of adjustment to actual climate and its effects; human intervention may facilitate adjustment to expected climate and its effects.

**Mitigation (of climate change):** A human intervention to reduce emissions or enhance the *sinks* of *greenhouse gases*.

**Resilience:** The capacity of social, economic and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity and structure while also maintaining the capacity for *adaptation, learning and transformation*.

**Sustainability:** A dynamic process that guarantees the persistence of natural and human systems in an equitable manner

Source: IPCC, 2018: Annex I: Glossary [Matthews, J.B.R. (ed.)].

A considerable limitation of the TE exercise of PARFA was the difficulty in obtaining the feedback of project stakeholders in Senegal, foremost government representatives, who frequently failed to respond to repeated emails and phone calls from the evaluation team and the project management team. The six national stakeholders consulted (without IFAD and UNIDO staff) and listed in Annex 5 are only about 50% of the targeted persons for whom tailor-made interview guides have been prepared.

### b. Project architecture

PARFA was designed as an added value venture upon the baseline investment (PAFA-E), with three distinct components: (i) Support to multi-stakeholder platforms (technical assistance), (ii)

<sup>9</sup> UNIDO, UNIDO Independent Evaluation Division. Evaluation Manual, Vienna, 2018.

Upscaling of sustainable and resilient good practices (investments), and (iii) Monitoring and evaluation of environmental impact and of project results (technical assistance). The relevant traits of PARFA are:

- *The multi-stakeholder nature of the project:* The project factsheet above names ten (10) involved Government organisations and NGOs to be involved in PARFA. In addition, the farmers' organisations (FOs), the women's organisations (WOs) and micro- and small rural enterprises (MSREs) in the five project regions deserve to be mentioned.
- *Several layers of projects:* IFAD's co-financed "Agricultural Value Chains Support" (PAFA; 2008-2016) was the precursor project of the "Agricultural Value Chains Support Project – Extension" (PAFA-E; 2014-2020), equally co-financed by IFAD. For PARFA (funded by GEF, and co-implemented by UNIDO and IFAD), PAFA-E was considered to be the baseline investment, for which PARFA was designed to generate added value in terms of local and global environmental benefits (see TOC).
- *The IAP mode adopted for PARFA:* The "Integrated Approach Programme" (IAP) was aiming at informing approaches to food security in the drylands of sub-Saharan Africa towards win-win solutions between food production and maintaining ecosystem services in the face of anticipated climate shocks.

**c. The financiers of PARFA**

- *Government of Senegal and beneficiaries.* In the framework of PARFA, and until 30 June 2021, the Government of Senegal has disbursed US\$93,000 against a provision of US\$1,647,616, and the project beneficiaries zero against a provision of US\$60,000.<sup>10</sup>
- *GEF funding to UNIDO and IFAD.* The total GEF funding, including the project preparation, amounted to US\$7, 339,450. On 30 June 2021, the GEF grant was disbursed to the tune of US\$5,008,377 or 62 % of the initial estimate, one year later than the anticipated project completion on 30 June 2020, which was extended to 30 June 2022.
- *IFAD as a co-financier.* The financial performance of the IFAD loan, co-financing the baseline investment PAFA-E, displays an analogous pattern. It is referred to below under Section d.

**d. Varying timelines and disbursement performances**

Synopsis 2 below highlights the various timelines of the interrelated projects and the main relevant sources of information these projects have generated. The IFAD-funded precursor project to PAFA-E, PAFA, is also displayed as its performance may have prompted GEF to consider an additional, environment-relevant, investment in Senegal. PAFA was completed in March 2016, followed by a Project Completion Report (PCR) in early 2017.<sup>11</sup> The PCR displays an IFAD loan disbursement rate of 97%, with no project completion date extension, and all ratings in the satisfactory range.<sup>12</sup> The subsequent Project Completion Report Validation (PCRv), a mandatory exercise for all IFAD-co-financed projects and routinely prepared by IFAD's Independent Office of Evaluation (IOE), confirms in particular that both PAFA's overall project performance and rural poverty impact were satisfactory.

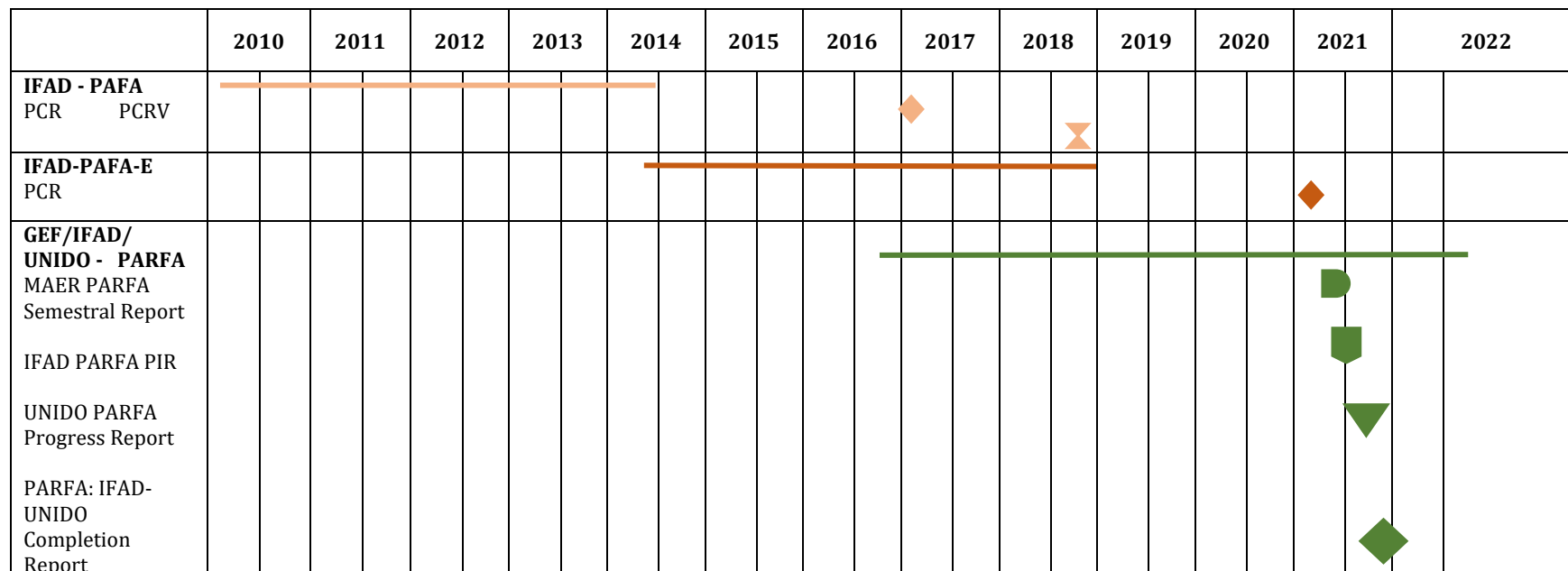
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<sup>10</sup> IFAD. Project Implementation Report (PIR), Agricultural Value Chains Resilience Support Project, July 2020 to June 2021.

<sup>11</sup> IFAD. Republic of Senegal, Agricultural Value Chains Support Project, Rome, 2017.

<sup>12</sup> IFAD. Republic of Senegal, PAFA, Project Completion Report Validation (PCRv), Rome, December 2018.

**Synopsis 2: Republic of Senegal: PARFA – Timelines, including underlying baseline investments; relevant reporting**



**Legend:**

- ◆ PAFA: PCR, 24/01/2017
- ⋈ PAFA: PCR/V, December 2018
- ◆ PAFA-E: PCR, 18/03/2021
- PARFA: MAER, Rapport semestriel, Juin 2021
- PARFA: IFAD, Project Implementation Report (PIR), July 2020-June 2021
- ▼ PARFA: ONUDI, Rapport d'avancement au 15 août 2021
- ◆ PARFA : FIDA-ONUDI, Rapport d'achèvement au 20 décembre 2021

Meanwhile, there is also a PCR of PAFA-E on record.<sup>13</sup> Compared to the precursor project PAFA, PAFA-E finally disbursed 58% of the project cost estimated at appraisal, and 76% of the revised project cost, which was adjusted downwards at the Mid-Term Review (MTR) of PAFA-E. The PCR rates the overall project performance of PAFA-E as moderately satisfactory, and rural poverty impact as moderately unsatisfactory. Thus, these sources suggest a distinct decline between PAFA and PAFA-E in terms in overall project performance and impact, which is mirrored by the respective disbursement rates.

By June 2021, IFAD also prepared a Project Implementation Report (PIR) to GEF regarding PARFA, cited in Footnote 7. By June 2021, the IFAD portion of the GEF grant was disbursed at a rate of UDS 2,232,252 against a provision of USD 3,609,725, or 62%. The PAFA-E PCR also briefly refers to the performance of PARFA, i.e., a PAFA-E component, noting that PARFA was launched, in the framework of PAFA-E, only in January 2018, and that these disjointed timelines did not allow mobilizing the GEF grant resources on time. On top of this initial delay, the IFAD PIR to GEF (Footnote 7) also highlights additional lags for construction works due to: (i) lengthy tender procedures, (ii) delays in signing the respective protocols and (iii) sluggish disbursement of funds to the contractors.

Concerning IFAD co-financing of PARA, the PCR of PAFA-E reveals that the original PAFA-E loan of USD 34,7 million was reduced to USD 26 million at MTR (i.e., by 25%). At the completion of PAFA-E, the IFAD loan was disbursed to the amount of USD 18,08 million, equivalent to 70% of the adjusted loan, and to 57% of the original loan. This is fairly congruent with the disbursement rate of the IFAD portion of the GEF grant of 62% (see above).

By 30 June 2022, the closing date of the GEF grant, the UNIDO portion was disbursed at 98%. as indicated in Table 2 below.

**Table 2: UNIDO: Senegal: Agricultural Value Chain Support Project (PARFA)<sup>14</sup>  
GEF Grant delivery report summary without support costs - UNIDO  
Grant validity and reporting period: 17 March 2017 - 30 June 2022 - in USD**

Component	Description	Agreement Budget (A)	Obligations and disbursements (B)	Percentage (B)/(A)
01-01	Building the capacities of actors	75'537	75'592	100,00%
01-02	Promoting mechanisms for good practices	51'683	50'635	97,97%
02-01	Promotion of renewable energies	231'251	230'886	99,84%
02-02	Agricultural Value Addition	2'602'211	2'540'796	97,64%
02-03	Dissemination and replication	115'487	113'402	98,19%
03-01	Monitoring and assessment of environment	181'001	180'993	100,00%
03-02	Monitoring and evaluation of activities	104'110	96'324	92,52%
04-01	Project Management Committee (PMC)	248'445	247'645	99,68%
	<b>Total without support cost</b>	<b>3'609'725</b>	<b>3'536'273</b>	<b>97,97%</b>

<sup>13</sup> FIDA. République du Sénégal, Agricultural Value Chains Support Project-Extension, Rapport d'achèvement, 18/03/2021.

<sup>14</sup> UNIDO. Senegal, PARFA, Grant Delivery Report, 30 June 2022.

**e. A multitude of reporting modes, sources and deadlines**

As Synopsis 2 indicates that there were various sources that report on PARFA, and at different points in time. In 2021 alone, MAER published a semestral PARFA report, followed by the IFAD PARFA PIR to GEF, then an UNIDO progress report related to PARFA in August and, finally, the PARFA UNIDO and IFAD completion report in December. All this makes the consolidation of relevant information difficult.

**2. Project's contribution to development results - Effectiveness and impact**

1.2 Project's achieved results and overall effectiveness


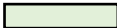

The key document for assessing overall effectiveness is the logframe and the reference to initial and effective indicator magnitudes. In all recent PARFA reports, a matrix of 27 indicators is shown, albeit with somewhat varying magnitudes due to various reporting deadlines. The most relevant matrix for the assessment of project effectiveness is the one derived from the PARFA completion report of December 2021, the logframe of which is displayed in Table 3 below.

Table 3: Actual status of logframe indicators				
Indicator	Target magnitude	Achieved magnitude	% achievement	Remarks
1. No. of mechanisms for the coordination and integration of good practices are promoted – National Strategic Investment Framework for Sustainable Land Management (NSIF-SLM) and National Agro-sylvo-pastoral Development Fund (FNDASP)	2	2	100%	A key source of verification is the final report on the PARFA Forum. <sup>15</sup> Accordingly, the PARFA FORUM platform was operational in November 2020, and was to be managed by the inter-professional platform for millet and sorghum (CNIF).
2. No. of awareness workshops	33	23	70%	
3. No. of participants at awareness workshops, sex-disaggregated	2,500	1,706	68%	The participation target of 1,200 has reached 100% in UNIDO-organized workshops, 39% in IFAD-organized workshops. 938 (55%) of the participants were women and 22% youth.
4. No of training workshops (20 on good agricultural practices, six on cereal processing, two on dairy processing)	28	12	43%	
5. No. of participants at training workshops, sex-disaggregated	800	220	28%	The participation target of 200 has reached 100% in UNIDO-organized workshops, 3% in IFAD-organized workshops
6. Resource mobilization strategy for sustainable land management	1	1	100%	
7. No. of discussion workshops on post-harvest and climate change, with follow-up visits	2	2	100%	Implemented by UNIDO
8. No. of participants at workshops and follow-up visits, sex-disaggregated	100	108	108%	
9. No. of exchange platforms to integrate sustainable technologies into value chains	4	0	0%	
10. No. of guides prepared for issue 9 above	1	1	100%	Prepared by IFAD
11. No. of value chains integrating a resilient approach	4	2	50%	Cereals and dairy were retained, out of a proposed array of millet, sorghum, cowpea, sesame, horticulture and village aviculture
12. No. of m3 of water storage built	10'000	0	0%	The selected enterprise has not implemented the works
13. No. of ponds rehabilitated	5	0	0%	Idem
14. No. of ha of degraded land in 6 valleys rehabilitated.	450	301	67%	The implementation was made possible thanks to conventions with the concerned municipalities.
15. No. of ha recovered with anti-salt barriers	300	300	100%	The barriers have been realized, but not the secondary improvements, because the selected enterprise has not executed the works by the end of 2021.
16. No. of ha of expended land recovered with soil and water conservation measures	800	450	56%	Two NGOs (ADT-GERT Interpenc) have accompanied the recovery process. However, the involved maintenance committees may not be solid enough to assure sustainability.

<sup>15</sup> Abouelenine Nadine. The PARFA Forum, Final Report, November 2020.



Table 3: Actual status of logframe indicators				
Indicator	Target magnitude	Achieved magnitude	% achievement	Remarks
17. No. of ha of mangrove restored	1,000	765	77%	The magnitude displayed as effective in December 2021 was 750 ha. The field visit in March 2022 determined 765 ha.
18. Quantity of CO2 stored in restored mangroves in tons of CO2-e/ha/year	4,5	5,7	127%	Determined by the final report of CSE <sup>16</sup> . Only the reforested mangrove area has been taken into account, and not the area covered by apiculture and oyster farming activities.
19. No of solar pumping units installed	20	12	60%	The firm selected for the panels and pumps have accomplished the installation.
20. No. of Biomethanation units installed	10	10	100%	All units will be completed and operational in May 2022
21. No. of solar cooling units installed	10	10	100%	
22. Reduction of CO2 emission due to solar pumping and biomethanation (final annual targets), in tons of CO2-e/year	130,4	293,3	225%	The basis of calculation is 10 biomethanation units achieved, with a reduction of 250,27 tons/year, and 12 solar pumping units completed, with a reduction of 43,04 tons/year, on the basis of the cited CSE final report.
23. No. of beneficiaries trained in the use of processing units	800	533	67%	Status of December 2021. ITA may train further users until June 2022.
24. No. of pilot projects for value addition of agricultural and livestock products	20	20	100%	Status of April 2022, projecting completion by 30 June 2022
25. Environmental impact monitoring system	1	1	100%	CSE assured this task. Reports are on record.
26. No. of user of the environmental impact monitoring system	400	15	4%	
27. No of strategic tools building on the environmental impact monitoring system	3	0	0%	

Legend: Component 1  Component 2  Component 3 

<sup>16</sup> République du Sénégal, GEF, FIDA, ONUDI, Centre de Suivi Écologique (CSE). PARFA, Mise en place d'un système de suivi-évaluation de l'impact environnemental dans la zone d'intervention du Projet, Rapport final d'exécution, Dakar, janvier 2021.

This matrix, in turn, is a relatively consistent extension of the logframe in the Project document.

An important indicator, not shown in Table 3, is the outreach of PARFA. The Project document and all other cited documents indicate a target household number of 5,250.

First, Table 3 records more than 2,000 participants in the various workshops under Component 1 against an aggregate target of 3,400. This underachievement is attributed to the restrictions caused by the Covid-19 pandemic. As the accounting unit is the number of households, some double-counting may have occurred.

More importantly, it is crucial to have a fair idea on how many households have concretely benefitted from PARFA under Component 2, directly affecting their livelihoods. Table 4 below attempts to display beneficiary household numbers per output category of Component 2. The detailed surveys of the national consultant of the TE team and the inputs of the UNIDO coordinator result in a total of close to 4,800 households that are direct beneficiaries of PARFA. As Table 4 shows, beneficiary counting is fairly complete, but gender differentiation is marginal in soil and water related undertakings. It cannot be excluded that some double-counting occurred in cases where more than a member of a beneficiary household is reflected in the figures indicated below.

**Table 4: Counting PARFA beneficiaries**

Type of project output	Physical output	No. of female beneficiaries	No. of male beneficiaries	Total no. of beneficiaries households
Rehabilitation of 3 valleys in 3 communes	301 ha out of a target of 450 ha	n. d.	n.d.	426
Land rehabilitated with anti-salt barriers for 3 FOs	300 ha out of a target of 300 ha	n.d.	n.d.	222
Exonded land recovered with soil n water conservation measures in 4 communes	450 ha out of a target of 800 ha	n.d.	n.d.	738
Mangroves rehabilitated with reforestation apiculture and oyster farming	765 ha out of a target of 1'000 ha	n.d.	n.d.	645
Solar pumping stations and irrigated plots	12 units out of a target of 20 with an final installed capacity of 66'635 WC (watts crest)	507	130	637
Biomethanation units	10 units out to a target of 10	n.d.	n.d.	10
Solar cooling units	10 units out of a target of 10	n.d.	n.d.	10
Beneficiaries trained in agricultural processing	No. of persons trained in dairy and cereal processing	n.d.	n.d.	533
Beneficiaries of newly installed processing units	2 dairy processing units 8 cereal processing units	68 363	3 340	71 703
Beneficiaries of existing processing units rehabilitated	Not detailed, total 10 units	780	14	794
<b>Totals where detailed</b>		<b>1'718</b>	<b>487</b>	<b>4'789</b>

Source: Evaluation team field mission by Abdoulaye Diarra. PARFA, Situation des indicateurs, contribution au rapport d'évaluation finale du PARFA, Dakar, 5 Avril 2022.

Table 3 infers that Component 1 of PARFA was moderately effective, partly due to Covid-19, which led to the number of awareness and training events, as well as the number of participants, that were lower than the expected targets. But the main outcome was apparently achieved, i.e., *the promotion of two mechanisms for the coordination and integration of good practices, see Indicator 1 of Table 3*. However, there is no evidence that the selected association (CNIF) effectively operated PARFA FORUM in 2021 and thereafter. At present, PARFA FORUM seems to

be inactive.<sup>17</sup> Component 2 displays a satisfactory effectiveness, with the exception of the failure to build 5 ponds with 10'000 m3 of storage capacity. Component 3, however, must be considered as largely ineffective *as the planned monitoring and evaluation system on environmental impact was and is not operational*. The aggregate effectiveness rating of PARFA is *moderately satisfactory (4)*.

## 2.2 Progress towards impact

### 2.2.1 Behavioural change

The field surveys of at least two undertakings per intervention category as displayed in Table 3 has yielded valuable insight into the perception of PARFA's beneficiaries. Recovering lost agricultural land due to salinization or degradation is much appreciated, and makes environmental sense. It has led to additional soil improvement measures in 2022 on the plots protected by e.g., anti-salt barriers. Significant (up to five-fold) yield increases are reported by the beneficiaries (Indicators 14-17 in Table 3). The interviewed beneficiaries confirmed that "rehabilitation pays".

The installation of biomethanation units was limited in numbers (10 beneficiary households, according to the target), but the perceived benefits are multiple: replacement of firewood or gas, better air quality in the kitchen and, last but not least, the use of the digester slurry as fertilizer for agricultural soils. The respondents also highlight the reduction of women's chores to fetch firewood (Photograph 1).

Solar pumping of ground water has caused an important outreach in terms of 673 beneficiaries as shown in Table 3. The number of sites has been reduced from 20 to 12, on the basis of a consultation about water availability.



flame

Photograph 2: Irrigated area with solar pumping  
(Abdoulaye Diarra)



Photography 1: Smoke-free biogas burner

(Abdoulaye Diarra)

An additional example of behavioural change is the rehabilitation of mangroves in the coastal areas of the project region, involving 645 households, presumably mostly women. They bear the main responsibility in protecting mangrove areas indirectly, by means of bee keeping (apiculture) and oyster farming. Less than 50% of the rehabilitated mangrove area is due to direct reforestation, which covers 376 ha out of the achieved rehabilitated area of 765 ha (see Indicator 17 in Table 3).

<sup>17</sup> Under the term "PARFA FORUM", searches resulted non-responsive between 29 June and 4 July 2022.



Photograph 3: Women collocating poaches for oyster farming  
(Abdoulaye Diarra)

Value addition through processing of agricultural produce, partly with solar energy, has interested more than a thousand beneficiaries (training participants and running processing units combined), with a probable prevalence of women (Table 3). Consequently, investing in such ventures represents significant socio-economic opportunities providing empowerment and a broader outlook for assuring sustainable livelihoods.



Photograph 4: Dairy processing  
(Mamadou Ndiaye)



Drying cereals  
(Mamadou Ndiaye)

When assessing progress to impact, it is also indicated to enquire whether PARFA has contributed to the global environmental impacts as set forth in the Project document, related to PARFA's target contributions to global environmental benefits. The situation is as follows, based on data in Table 3:

Target: 2'100 ha of improved management of landscapes and seascapes	Achieved: 1'515 ha (72%)
Target: 1'800 ha under sustainable land management	Achieved: 1'051 ha (58%)
Target: 5 freshwater basins of accumulated 10'000 m <sup>3</sup>	Achieved: 0 (0%)
Target: 130.2/year of CO <sub>2</sub> -e by solar pumping and bimethanation (direct mitigation)	Achieved: 293.3 tons (225%)
Target: 4.5 t/ha/year of CO <sub>2</sub> -e stored in rehabilitated mangrove (indirect mitigation)	Achieved: 5.7 tons (127%)

The final report of CSE accounts only for the 376 ha reforested, with a calculated average of six zonal test sites resulting in of 5.7 tons of CO<sub>2</sub>e/ha/year stored, thus exceeding the appraisal

target of 4.5 tons. Calculated over the 376 ha, 2'143.2 tons of CO<sub>2</sub>e/year would be stored in the reforested mangrove area of PARFA. Compared to an annual per capita CO<sub>2</sub>e emission, calculated for Senegal in 2016 of 0.55 tons, the mangrove rehabilitation subcomponent of PARFA alone would offset the per capita CO<sub>2</sub>e foot print of close to 3'900 persons.<sup>18</sup>

The 12 solar pumping and 10 biomethanation unit also reduce CO<sub>2</sub>e emissions. The CSE final report infers that the annual emission reduction effect is 2.25 time bigger than the appraisal target of 130.4 tons CO<sub>2</sub>e/year reduction

On the basis of the above, it is foremost Component 1 and 2 that pave the road to PARFA impact, which is rated as *moderately satisfactory (4)*.

### 2.2.2 Broader adoption

The assessment below follows the UNIDO terminology on the four dimensions of broader adoption (mainstreaming, replication, upscaling and market change). The purpose of Component 2 itself was *to scale up environment and climate relevant technologies*. Considering the outreach of Component 2, and the achieved indicator magnitudes as given in Table 3, it is not unreasonable to conclude that this has been achieved to some extent.

Mainstreaming. The interviews with project stakeholders and ITA hint to *mainstreaming* spill-over of some of PARFA's thrust areas. One is the combined rehabilitation strategy of mangrove areas that is close to FAO's approach, which aims at including also aquatic and halieutic resources in their strategy.<sup>19</sup> IFAD respondents have stressed the positive role of lead NGOs, such as Wetland International in this context.<sup>20</sup>

Replication. The ITA respondent to the evaluation noted that good PARFA practice related to value-addition in agriculture and food processing has found replication in the framework of the "Support Project for the Development of Competences and Entrepreneurship of Youth (PDCEJ) " co-financed by the African Development Bank (AfDB).<sup>21</sup> Indeed, the consulted website displays know-how promoted by PARFA (renewable energies and agribusiness).

Upscaling. PARFA, in particular via UNIDO, has invested significantly in the preparation of manuals and other dissemination materials, as detailed below:

- Four roll-ups regarding UNIDO's general approach and concerning sustainable energies and natural resources
- Eight manuals, mostly referring to food processing technologies and hygiene and the design and installation of biogas and solar power units. The inclusion of a small enterprise management manual is commended.

These materials constitute valuable assets for the dissemination of technologies although *upscaling* in a wider context and by other projects or programme is not explicitly mentioned, e.g.,

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<sup>18</sup> [Senegal CO<sub>2</sub> Emissions - Worldometer \(worldometers.info\)](https://worldometers.info/senegal/), accessed on 18 April 2022.

<sup>19</sup> [Notre bureau | FAO au Sénégal | Organisation des Nations Unies pour l'alimentation et l'agriculture.](#), accessed on 22 April 2022.

<sup>20</sup> [Our Work - Wetlands International](#), accessed on 15 April 2022.

<sup>21</sup> <https://pdcej.sn/presentation/>, accessed on 25 April 2022.

in the UNIDO MTR.<sup>22</sup> The PARFA Completion Report is, on the other hand, critical in that it states that the project lacked an *upscaling strategy over and above its boundaries*.

Market change. On this last category of broader adoption, there is no explicit evidence available in the cited references under upscaling. What can be assumed is that the achievements of Component 2, especially regarding the value addition by preserving and processing agricultural produce, has been easily absorbed by local markets. According to Table 4, the food processing activities alone have benefitted more than 2,700 households. When including the households adding value to mangroves with beekeeping and oyster farming, close to 3,400 producer households will probably have re-shaped local markets. A discussion at mission debriefing with UNIDO Representative from the UNIDO Dakar Field Office confirmed this hypothesis. This is highly relevant for the "Agropole Centre" in Kaolack (see TOC in Section 1.3).

### 3. Project's quality and performance

#### 3.1 Design

PARFA has undergone a painstaking design process. Both project planning documents have analysed the economic, social and environmental background in detail. They highlight the risks and opportunities of agriculture, livestock and fishers of Senegal with special consideration of environmental and climate change aspects.

The resulting agenda of action underlying PARFA's intervention logic is *strategically comprehensive*. This is commendable as such, but the concrete intervention programme of PARFA could as well have been *tactically selective*. This is meant to say that it would have been possible to select, within the three components, less complex interventions in terms of the number of stakeholders and more restraint in the number and type of interventions. Covering, as the strategic analysis of the context implied, all environmentally plausible interventions lead to a big number of activities, stakeholders and implementing partners that may explain the substantial delays until PARFA was operational, especially for IFAD (2018).

Choosing activity lines in Component 2 that were requiring lengthy tendering and adjudication processes for construction companies, resulted in zero or incomplete implementation (Indicators 12, 13 and 15 in Table 3). Component 3 was probably too ambitious in terms of complexity, to make a comprehensive and broad-based environmental impact monitoring work.

The TOC included in the project document is reproduced in Annex 4. As such, it convincingly models the underlying logic of the three project components, in terms of the baseline situation, the GEF intervention with the three components *of measuring & learning, scaling up and harmonization*, the outcomes and expected results. In hindsight, it may be too generic as a model and not close enough to the realities of project implementation in a complex institutional environment.

The two, complementary, organigrams displayed on pages 52 and 53 of the project document infer that the institutional environment was indeed complex. The first organigram (Overall Project Organization and Management) displays a structural pattern indicating the involved partners in generic terms, and detailing administrative and functional liaisons as well as fund flows, separate for IFAD and UNIDO. The second organigram (UNIDO's Project Organization and Management) is complementary as it also assigns functions to some of the actors. It is not entirely clear which PARFA implementer was responsible for which components or subcomponents, and

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<sup>22</sup> UNIDO. Senegal, Agricultural Value Chain Resilience Support Project (PARFA), Mid-term Evaluation Report, 1 July 2019 – 30 June 2020.

the indications in this regard in other parts of the project document (component descriptions and matrices) are ambiguous.

It was further complicated by the fact that IFAD was both the main funding agency of the baseline investment, PAFA-E, and the implementing agency of the IFAD portion of the GEF grant, PARFA. In its quality of main financier of PAFA-E, implementation responsibility was with (i) the Ministry of Agriculture and Rural Equipment (MAER); (ii) the Ministry of Livestock and Animal Production (MEPA); (iii) the Ministry of Environment and Sustainable Development (MEDD); (iv) the Ministry of technical education and vocational training; (v) the Ministry for Gender and Relations with African and Foreign Women Associations; (vi) the Ministry of the Family, Women's groups and early childhood; (vii) the Ministry of Female Entrepreneurship and Microfinance; and (viii) the Ministry of Ecovillages, Reservoirs, Artificial Lakes and Aquaculture.

UNIDO, in comparison, was a relatively free-standing implementing agency of its portion of the GEF grant, focusing on energy and food processing in Component 2 while IFAD covered water and soil management aspects in the same Component 2. This led to differed implementation speeds, a pattern that was also given by the varying timelines of PAFA-E and PARFA (Synopsis 2). The interviews with IFAD representatives infer that the PAFA-E Project Management Unit (PMU) had considerable management problems with PAFA-E alone (see also Section 2.5 d.). The add-on of PARFA may have exacerbated these limitations while it is not possible, on the basis of the available evidence, to suggest that there were competing priorities between PAFA-E and PARFA.

It is understood that GEF grants aiming at value addition over and above baseline investments are bound to display a certain complexity. More concentration on activity lines requiring less administrative tendering, adjudication and disbursement complications, e.g., by focusing on farmers' organizations (FOs) and women's organizations (WOs) with the support of specialized NGOs or institutes, such as Wetlands international or ITA, would probably have given broader effects. The relative success stories, in terms of outreach and CO<sub>2</sub>e emission reduction, of mangrove rehabilitation and energy efficient pumping and food processing, seems to point in such a direction.

The above considerations related to the *design* of PARFA also bear on the *coherence* of this project. As is was designed, it was coherent with the complexity of the subject matter, but less so with the prevailing institutional context and the management capacity of the baseline investment PAFA-E. In an environment of complex subject matter combined with limited management capacities, it may have paid to adopt more simplicity in project implementation arrangements. More than half of the consulted nine respondents in Senegal concur with this assessment. Consequently, both evaluation criteria, *design and coherence*, are rated as *moderately satisfactory (4)*.

### 3.2 Relevance

The scientific quality and carefulness of defining the major thrusts of PARFA have been highlighted above. The objectives of the project respond to evident and verifiable potentials and constraints. The preparation process took great care to align to the priorities of the Government of Senegal, such as the Agrosilvopastoral Orientation Law (LOASP) adopted in 2004; (ii) the National Agricultural Investment Programme (PNIA), adapted for the development of livestock farming; (iii) the Accelerated Programme for Agriculture in Senegal (PRACAS); (iv) the Environment Sector and Sanitation Policy Letter (LPSE); and (v) the National Strategic Investment Framework for Sustainable Land Management (NSIF-SLM).. The project document also credibly explains why agricultural value chains in Senegal needed more resilience against environmental and climate change risks (environmental safeguards).

During the project preparation process, potential beneficiary groups were involved, and the share of women and youth determined (social safeguards). In terms of relevance, this TE confirms that PARFA responded to the needs of the target groups and that it was in line with UNIDO’s mandate. More particularly, referring to the Pilot Country Partnership Project UNIDO Senegal, PARFA was consistent with the second vertical axis “Integrated and Competitive Agropoles”.<sup>23</sup>

All respondents of interviews and in the course of 20 project site visits have unanimously agreed that PARFA was and still is relevant. The TE rating therefore is *satisfactory (5)*.

### 3.3 Efficiency

The effectiveness lag for the IFAD portion of PARFA was 12 months, and for the UNIDO portion three months. In terms of disbursement rates of the GEF grant, UNIDO is likely to reach close to 100% by June 2022 (Table 2) while IFAD displays a disbursement rate of 62% by 30 June 2021 in accordance with the cited PIR.

The above effectiveness lags and the subsequent ones highlighted in the cited IFAD PIR were due to: (i) lengthy tender procedures, (ii) delays in signing the respective protocols and (iii) sluggish disbursement of funds to the contractors, indicated a low efficiency. Partly, they are related to the decline in project performance between PAFA and PAFA-E, referred to in Section 2.6 d.

With regards to co-financing, an important dimension in a GEF funding scheme, the following Table 5 displays both the appraisal estimates and the effective amounts, indicating the sources. The IFAD co-financing for PARFA reached 69% at completion, and that of UNIDO 91%, while the materialized co-financing portions of the Government of Senegal and the beneficiaries resulted in 6% and nil at completion, respectively.

**Table 5. PARFA - Co-Financing source breakdown in USD**

Name of Co-financier (source)	Appraisal estimates			Effective amounts		
	In-kind	Cash	Total Amount	In-kind	Cash	Total Amount
IFAD (PAFA-E)		26,130,000	26,130,000		18,080,000	18,080,000
UNIDO	319,700	80,300	400,000	264,945	100,000	364,945
Government of Senegal	1,647,616	0	1,647,616	93,068	0	93,068
Beneficiaries	366,517	0	366,517	0	0	0
<b>Total Co-financing</b>	<b>2,333,833</b>	<b>26,210,300</b>	<b>28,544,133</b>	<b>358,013</b>	<b>18,180,000</b>	<b>18,538,013</b>

Sources:

- Appraisal estimates: Project document. Annexe H (French), Table 4, Page 21 (document cited).
- Effective amounts re. IFAD co-financing: IFAD. PAFA-E Project Completion Report, 18 March 2021, Paragraph 233, Table 10 (document cited).
- Effective amounts re. Government of Senegal and beneficiaries’ co-financing: IFAD. GEF Project Implementation Report, 1 July 2020 – 30 June 2021, Page 1 and 2 (document cited).
- Effective amounts Re. UNIDO co-financing: UNIDO co-financing matrix.<sup>24</sup>

<sup>23</sup> ONUDI, Bureau de l’Évaluation et du Contrôle Interne, Division d’Évaluation Indépendante. Évaluation indépendante, Programme de Partenariat Pays ONUDI – Sénégal, 2015-2021, juin 2022.

<sup>24</sup> UNIDO, Meryem Sghir. Senegal, PARFA, Co-financing from UNIDO, document created on 8 July 2022.



In the case of UNIDO, the ratio between the total and project management costs of the GEF grant can be determined, by adding the effective PMC cost and the support cost displayed in the Grant Delivery Report. The resulting cost is USD 576,978 or 16%. This is acceptable for training and TA-intensive projects. The cited June 2021 IFAD Project Implementation Report related to PARFA (PIR) does not provide a detailed cost breakdown of the IFAD portion of the GEF grant.

Another indicator of efficiency is in general the project cost per beneficiary household of a given project. In the case of to PARFA, the total effective disbursements of the GEF grant amount, by 30 June 2021 for IFAD and 15 April 2022 for UNIDO, to an aggregate sum of USD 5'802'604. The beneficiary households indicated in in Table 4 are 4,789. Dividing the total disbursed GEF grant by this number, the per household cost of PARFA would be USD 1'212. Again, this is in the range of the conceivable in a training and TA-intensive project. This order of magnitude (USD 700-1,500 per beneficiary household costs in a typical IFAD operation) is derived from over 30 PCRVs since 2012.

Weighing the information given above, PARFA efficiency is rated as *satisfactory (5)*.

### 3.4 Sustainability

Sustainability is part of PARFA's objective "Increasing sustainability and resilience of agriculture and value chains for an enhanced food security in Senegal". A first key question to examine here is whether PARFA has tangibly enhanced the prospects of sustainability of the two chosen value chains (cereals and dairy) in the face of environmental and climate change risks.

It is fair to say that the 4'789 PARFA beneficiaries listed in Table 3 have, thanks to the project, brighter livelihood prospects, either by using natural resources and irrigation water more sustainably, and/or by adding value by food processing. The level of stakeholder ownership can be considered as high. As PAFA-E has invested in strengthening value chains as such, the outlook for sustainability is good.

On the downside, project design has underestimated project management risks, and this was exacerbated by a complex institutional set-up and cumbersome administrative processes that depended on routines inherent to the baseline investment (PAFA-E).

The marginal outcome of Component 3 that aimed at establishing a monitoring and evaluation system on environmental impact is constraining sustainability. This infers that PARFA did not contribute to build adequate instruments to identify future environmental and climate change risks. Neither the Project document nor the detailed PARFA progress reports mention an exit strategy. The respondents in Senegal are somewhat divided regarding sustainability, underlining that the FOs would need further support. Sustainability is rated as *moderately satisfactory (4)*.

### 3.5 Gender mainstreaming

Already in its design stage, PARFA went at length to set the stage for gender mainstreaming. UNIDO has drafted a detailed gender mainstreaming checklist including 12 control points of which 11 were considered fully relevant.<sup>25</sup>

A noteworthy point is that this checklist explicitly responds to the key question: "Does the project explicitly address a gender issue or issues"? It notes that PARFA was subject to the overarching

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<sup>25</sup> UNIDO. Agricultural Value Chain Support Project (PARFA, PTC/AGR Gender Mainstreaming Checklist for Projects, : SGHIR MERYEM, 18 February 2016

Integrated Approach Pilot Programme on Food Security (IAP-FS), which is mainstreaming the following gender concerns, with indicators to be selected depending on the nature of the project:

- Promote economic empowerment of rural women and men,
- Increase rural women’s decision-making power and representation,
- Achieve an equitable workload balance

The PARFA progress report dated August 2021 does refer extensively to women and their participation in project activities. A comprehensive assessment of gender and youth participation is given only for the 16 awareness workshops conducted until that date. The then valid participant number target was reached at 100% (1’200), with a 54% share of women and 21% of young people. While the 30% target for women was overshoot, the 30% target for youth was not. The progress report attributes this to the generally low representation of young people in FOs. The same progress report mentions women participation many times more, but the information is anecdotic and specific to the visited FOs, which makes a comprehensive gender and youth-related accounting difficult.

In the final report of PARFA dated December 2021, in the then accumulated 23 awareness workshops conducted, out of the 1’706 participants, 938 (55%) were women, and 355 (22%) youth. In Table 3, in the positions where women are specifically mentioned, their representation exceeds male presence nearly fourfold (gardening with solar pumping stations food processing units). This infers that women have defended a solid presence in economic activities where they traditionally have played an important role.

However, PARFA reporting falls short of the standards UNIDO set in the cited Gender Mainstreaming Checklist. There are no consolidated data on women’s decision-making power and equitable workloads obtained thanks to PARFA. The interviewed respondents did not take into account the mentioned standards. Therefore, gender mainstreaming is rated as *moderately satisfactory (4)*.

#### **4. Performance of Partners**

##### **4.1 UNIDO**

UNIDO had the advantage to be part of the design stage of the PARFA, documented in the respective back-to-office reports (BTOs).<sup>26 27</sup> UNIDO’s role in preparing the Gender Mainstreaming Checklist has already been mentioned in Section 4.5, and its effort of dissemination and knowledge management around UNIDO’s subject matters, in the form of 13 rollups, manuals and other publications in Section 3.2.2 on broader adoption. UNIDO’s visibility in connection with PARFA is therefore considerable.

Regarding the supervision missions of PARFA, it is worthwhile to quote the project document: *“The project will be directly and jointly implemented by IFAD (Dakar office) and UNIDO, with the participation of senior officers of the Ministry of Economy, Finance and Planning (MEFP), MAER, MEPL, MEPLs (at least one supervision mission per year). For efficiency, PARFA supervisions will be jointly carried out with these of PAFPA-E”*.

UNIDO carried out a mission in Dakar on 11-15 July 2017, mainly to prepare the official launch event of PARFA on 25 July 2017. The respective BTO provide evidence of a joint meeting with

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<sup>26</sup> UNIDO. BTO to PTC/AGR/FSU, 30.06.2015.

<sup>27</sup> UNIDO. BTO to PTC/AGR/FSU, 09.05.2016.

MAER and the IFAD PAFA-E team.<sup>28</sup> As subsequent mission in December 2018 also records a meeting with the IFAD team, devoted to the review of the 2018 annual workplan (AWPB) and the AWPB 2019.<sup>29</sup> In October 2019, a further BZO is on record. As in the BTO of 2018, the need of increased synergies between IFAD and UNIDO are highlighted.<sup>30</sup>

In May 2019, an implementation support mission took place, in which a UNIDO consultant co-animated an awareness workshop for senior civil servants on climate change. He also closely looked into the UNIDO-led energy and food processing aspects of Component 2.<sup>31</sup> In the same year, the same consultant also participated in the mid-term review (MTR) of PARFA.<sup>32</sup> In essence, his report notes that PARFA implementation was delayed, in part also due to staffing problems of IFAD in the PAFA-E Project Management Unit (PMU) and to the delayed signing of the PARFA government agreement. The PARFA MTR has nevertheless permitted to hand over to UNIDO the implementation of ten awareness workshops that then took place. UNIDO's own MTR of PARFA (Footnote 16) builds on the joint PARFA MTR of September 2019 as the dates are mentioned therein.

The above suggests that UNIDO has invested substantial efforts and time in the design, implementation and monitoring of PARFA. Except for the 2019 joint MTR of PARFA, it is however fair to say that PARFA did not benefit from formal joint supervision missions but rather annual meetings between the two GEF implementing agencies. This may be why the term “synergies between IFAD and UNIDO” is revolving all over the cited documents.

The observed sub-optimal interface quality between IFAD and UNIDO cannot be simply attributed to one of the GEF implementers, but rather to the complex project design and the complicated institutional arrangements (see Section 4.1). The interviews conducted both with national stakeholders and IFAD representatives in Senegal assess UNIDO's closeness to the beneficiary population, the soundness of the technical solutions proposed and its implementation flexibility as distinctly positive. UNIDO performance is rated as *satisfactory (5)*.

## 4.2 IFAD

The case of IFAD is more complicated as it had to accommodate between the lead financier of the baseline investment PAFA-E and the GEF implementing agency. One major fact is clear: It was thanks to the baseline investment of PAFA-E that PARFA was in a position to reach out to close to 5,000 direct beneficiary households in the project area.

However, the performance decline of the PAFA-E PMU came in a moment where speed would have been essential to make good of the delays accumulated. This was not the case, and time was short to correct the deficiencies by addressing staffing problems at the PMU. Both the PAFA and the PAFA-E PCRs are clear that there were project performance and rural poverty impact deficits of PAFA-E compared to PAFA. The remark under UNIDO performance on the absence of formal joint supervision mission is also applicable to IFAD. Synopsis 2 also shows that reporting on PARFA was not done jointly.

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<sup>28</sup> UNIDO. BTO to PTC/AGR/FSU, 16.07.2017.

<sup>29</sup> UNIDO. BTO to PTC/AGR/FSU, 08.12.2018.

<sup>30</sup> UNIDO. BTO to PTC/AGR/FSU, 27.10.2019.

<sup>31</sup> UNIDO. Rapport de Mission : Participer à la mission d'appui du gouvernement et du FIDA aux projets PAFA-e et PARFA, Appui à la réalisation des DAO des ateliers de production, Revue du travail des partenaires : ITA et CSE, Identification des synergies entre divers partenaires et le PARFA et ONUDI, Jean-François DE SAEDELEER, Mai 2019.

<sup>32</sup> UNIDO. Rapport de Mission : Participer à la mission de revue mi-parcours du PARFA, Elaboration de synergies entre des partenaires et le PARFA-ONUDI, Clarifier les besoins, Jean-François DE SAEDELEER, Octobre 2019.

Considering the above, IFAD performance rating related to PARFA *moderately satisfactory (4)*.

#### 4.3 National counterparts

Regarding the PARFA Steering Committee, there are two documents on record: (i) the minutes of the approval of the AWPB of 2019 and the minutes of the AWPB 2019 and the approval of the 2020 AWPB.<sup>33 34</sup> Both references infer that all involved ministries were present and that a formal, but vivid, interaction took place between these ministries and the PAFA-E/PARFA PMU. Most recommendations formulated aimed at increasing the speed and efficiency of project implementation. Somewhat on the downside, it was not possible to contact the GEF Focal Point in Senegal, despite repeated attempts. This would have been important for the TE to make a well-measured assessment.

PARFA did not work only with ministries. Two other government organizations deserve a mention, i.e., the Centre de Suivi Écologique (CSE) and the Institut de Technologies Alimentaires (ITA). The former was in charge of assessing PARFA technologies in terms of their CO<sub>2</sub>e emission reduction effects. The relevant reporting of CSE is referred to in Section 3.2 on progress to impact. The latter, ITA, played and still plays a key role in training the operators of food processing units. Thanks to ITA, the 20 food processing units will finally become operational and the respective staff trained.

The role of NGOs such as Wetlands International, ADT GERT and Interpenc was crucial to reach the close to 5'000 beneficiaries of PARFA, notably under Component 2. The contacted respondents have all underlined in detail their tangible contribution to PARFA. The project has secured their participation with formal contractual arrangements. Summing up, the performance of PARFA'S national counterparts is rated as *satisfactory (5)*.

#### 4.4 Donor

It is the merit of GEF, and of the involved beneficiaries and national stakeholders, including IFAD and UNIDO, during the PARFA design stage, that the project has built a solid scientific basis for a comprehensive and consequent strategy to increase resilience in agricultural value chains in Senegal. On the other hand, there may have been a vice to this virtue: a project design that *lacks tactical selectivity* for the sake of easier implementation in a complex institutional set-up. Considering the above, GEF performance is rated as *moderately satisfactory (4)*.

### 5. Factors facilitating or limiting the achievement of results

#### 5.1 Monitoring & evaluation

At the outset, it is correct to say that PARFA'S matrix of 27 indicators is basically consistent with the original GEF logframe. It even dissociated compound indicators with more than one magnitude in the original logframe for easier interpretation. What the M&E did not do is to disaggregate the outreach target of 5'250 households into the various intervention categories, e.g., how many beneficiaries, gender and age-differentiated, can be attributed the ten solar cooling units, or the 300 ha of land area improved with anti-salt barriers?

The case of gender mainstreaming (Section 4.5) may be a good example to illustrate the shortcomings of PARFA'S M&E system. It is true that the cited Gender Mainstreaming Checklist is particularly demanding as it infers more than just measuring gender in quantitative data on

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<sup>33</sup> République du Sénégal, FEM, FIDA, ONUDI. PARFA, procès-verbal de la Réunion de Pilotage sur le PTBA 2019, janvier 2019.

<sup>34</sup> République du Sénégal, FEM, FIDA, ONUDI. PARFA, procès-verbal de la Réunion de Pilotage du PAFA-E et du PARFA, Kaolack, décembre 2019.

project participants. It would have required indicators measuring other dimensions of gender mainstreaming, such as the representation of women in decision-making organs and changes in their varying workloads as a consequence of PARFA achievements. The ambitions of the Gender Mainstreaming Checklist should have been reflected in PARFA’s logframe, and then in the design and routine of its M&E system.

However, it was still possible to build, albeit with some additional effort, Table 3 that informs on the essence to the 27 core indicators of PARFA. Consequently, the logframe adopted, as well as the M&E design of PARFA is rated as *moderately satisfactory (4)*, while the routine implementation of M&E is rated as *moderately unsatisfactory (3)*, also because it had no perceptible effect on result-based-management, see Section 6.2 below.

### 5.2 Results-based management

The documents on record, i.e., the UNIDO BTOs, the cited reports of the UNIDO consultant of May and October 2019, the PAFA-E PCR, the cited steering committee minutes, as well and the PARFA Completion Report of December 2021 suggest that PARFA’s management lacked synergies between the two main GEF grant implementers and had limited efficiency. The first possible reason is that the complexity of the project and the complicated institutional setting made result-based management difficult. Then, the observed deficiencies of the M&E system and staffing problems of the PMU caused many delays that finally affected project effectiveness. The minutes of the PAFA-e/PARFA Steering Committee give clear indications that project management was not on top of all challenges combined. Therefore the project results-based management is rated as *moderately unsatisfactory (3)*.

### 5.3 Other factors

The key factor affecting the performance of partners was the complex design of PARFA, exacerbated by a baseline investment, PAFA-E, that was increasingly exposed to its own management shortcomings in a moment in which top performance would have been required to bring the GEF grant to fruition. In the case of PARFA, the underlying ambitions were indeed very high.

### 5.4 Overarching assessment and rating table

Table 6 summarises the rating of all evaluation criteria for this project.

**Table 6: Rating summary**

#	<u>Evaluation criteria</u>	<u>Mandatory rating</u>
<b>A</b>	<b>Progress to impact</b>	<b>4</b>
<b>B</b>	<b>Project design</b>	<b>4</b>
1	14. Overall design	4
2	15. Logframe	4
<b>C</b>	<b>Project performance</b>	<b>4</b>
1	16. Relevance	5
2	17. Effectiveness	4

#	Evaluation criteria	Mandatory rating
3	18. Coherence	4
4	19. Efficiency	5
5	20. Sustainability of benefits	4
<b>D</b>	<b>Cross-cutting performance criteria</b>	<b>4</b>
1	21. Gender mainstreaming	4
2	22. M&E: 10 M&E design 11 M&E implementation	4 3
3	23. Results-based Management (RBM)	3
<b>E</b>	<b>Performance of partners</b>	<b>5</b>
1	24. UNIDO, IFAD	5 and 4, respectively
2	25. National counterparts	5
3	26. Donor	4
<b>F</b>	<b>Overall assessment</b>	<b>4</b>

## 6. Conclusions, lessons learned, and good practices.

### 6.1 Conclusions

PARFA was a relevant undertaking, following a value-addition path typical for GEF grants. It responded to global environmental concerns, which were explicitly put in relation with the environmental and climate change-relevant outputs of PARFA. The project was also relevant for the national policy framework and for IFAD's and UNIDO'S strategies. The GEF design carefully took into account the needs of the rural population considered in the project area, and proposed a comprehensive strategy to address the resilience constraints of agricultural valued chains.

In practice, this comprehensive strategy to address the constraints may have been too complex and not sufficiently led by tactical selectivity, focusing on interventions that could have matured benefits more rapidly, e.g., interventions requiring less civil engineering at scale and more grassroots involvement of FOs.

While effectiveness was partly constrained by the ambitious design, i.e., no tangible achievement was achieved under Component 3, which was under the responsibility of the M&E person of PAFA-E and CSE. Components 1 and 2 were effective, and progress to impact moderately satisfactory. As a matter of fact, PARFA overshot the CO2e emission reduction targets, both related to mangrove rehabilitation and to the introduction of solar energy for irrigation and food processing. Efficiency is also rated as satisfactory, while sustainability may be constrained by the absence of a monitoring and evaluations system of environmental impact (Component 3). By and large, the performance of partners is in the satisfactory range. The only moderately unsatisfactory rating refers to result-based management, which is not perceptible when assessing the overall management performance of PARFA.

## 6.2 Lessons learned

There are five lessons at hand, when looking at PARFA, again for UNIDO projects combine with GEF funding:

- a. *Only practical implementation on the ground reveals the true value of an intervention.* PARFA's success was born by close to 5'000 households that improved livelihoods and over-complied the expected targets in terms of CO<sub>2</sub>e emissions reduction, despite delays and project management shortcomings, partly due to the complex design and complicated project implementation arrangements.
- b. *Subject matters that are complex by nature are not well served when the project implementation set-up is complicated, disjointed on the timeline and building on an underperforming baseline investment.* This is a crucial lesson for the future prospects of GEF to contribute to enhanced resilience against environmental and climate change-related risks, which are likely to increase further.
- c. In order to have more significant results, such projects should be implemented *over a period of minimum six years* in order to take into account administrative related issues and consolidate the achievements made.
- d. In order to achieve results rapidly, interventions should be chosen more selectively at project design, e.g. avoiding big-scale civil engineering and focusing on those producing quicker benefits. This would make the project less complex and facilitate project implementation.
- e. *More joint supervision and joint reporting between IFAD and UNIDO could have improved project synergy, efficiency and results.* Indeed this was the intention of the project at design, but was not carried out during the project implementation. Thus this is a missed opportunity as joint supervision and monitoring missions offer excellent occasion for project staff and management of both implementing agencies to reflect and assess project progress, make corrective actions and joint decisions, and follow up pending issues.

## 6.3 Good practices

PARFA hints at one key good practice, namely to systematically *searching for economic and well-being co-benefits* while pursuing *explicit environmental benefits such as better land and water use, and the reduction greenhouse gas emissions*. After all, it was these co-benefits that brought the participating FOs and WOs to the PARFA table.

**ANNEXES:**

**Annex 1: Terms of reference of the PARFA TE**

Web link to the TOR: [https://www.unido.org/sites/default/files/files/2022-07/GFSEN-150071\\_TOR\\_211119.pdf](https://www.unido.org/sites/default/files/files/2022-07/GFSEN-150071_TOR_211119.pdf)



## Annex 2: Evaluation framework – Evaluation criteria and guiding questions

#	Evaluation criteria	Evaluation key questions (TOR)	Additional guiding questions proposed
<b>A</b>	<b>Progress to impact</b>	What are the key drivers and barriers to achieve the long-term objectives? To what extent has the project helped put in place the conditions likely to address the drivers, overcome barriers and contribute to the long-term objectives?	What are observed, or probable, achievements driving progress to impact, in the following impact domains: <ul style="list-style-type: none"> <li>• Safeguarding environment,</li> <li>• Economic performance,</li> <li>• Social inclusiveness.</li> </ul> Is there tangible evidence of mainstreaming, upscaling and behavioural change related to PARFA’s environmental and climate change concerns?
<b>B</b>	<b>Project design</b>		
1	Overall design		Did the design of PARFA respond to the generic requirements of equilibria between mission, competence, authority and responsibility? Was the project design consistent with the country’s priorities, in the work plan of the lead national counterpart?
2	Logframe		Was the logframe’s hierarchy of overall goal, development objective and outcomes logical and plausible? Was the PARFA logframe congruent with that of the baseline investment (PARFA-E)? Were the assumptions plausible and realistic?
<b>C</b>	<b>Project performance</b>		
1	Relevance		Did the PARFA design respond to evident and verifiable potentials and constraints? Is there evidence that the project beneficiaries have actively been involved in the identification of potentials and constraints? Have the donor’s priorities been considered? Have social and environmental safeguards been considered? <sup>35</sup>
2	Effectiveness	How well has the project performed? Has the project done the right things? What are the project’s key results (outputs, outcome and impact)? To what extent have the expected results	What are the reported disconnects between logframe indicator magnitudes and effective magnitudes attained at a given date? Is there tangible evidence of the reported magnitudes (nature and reliability of sources, geo-referenced data and maps, counterfactuals)?

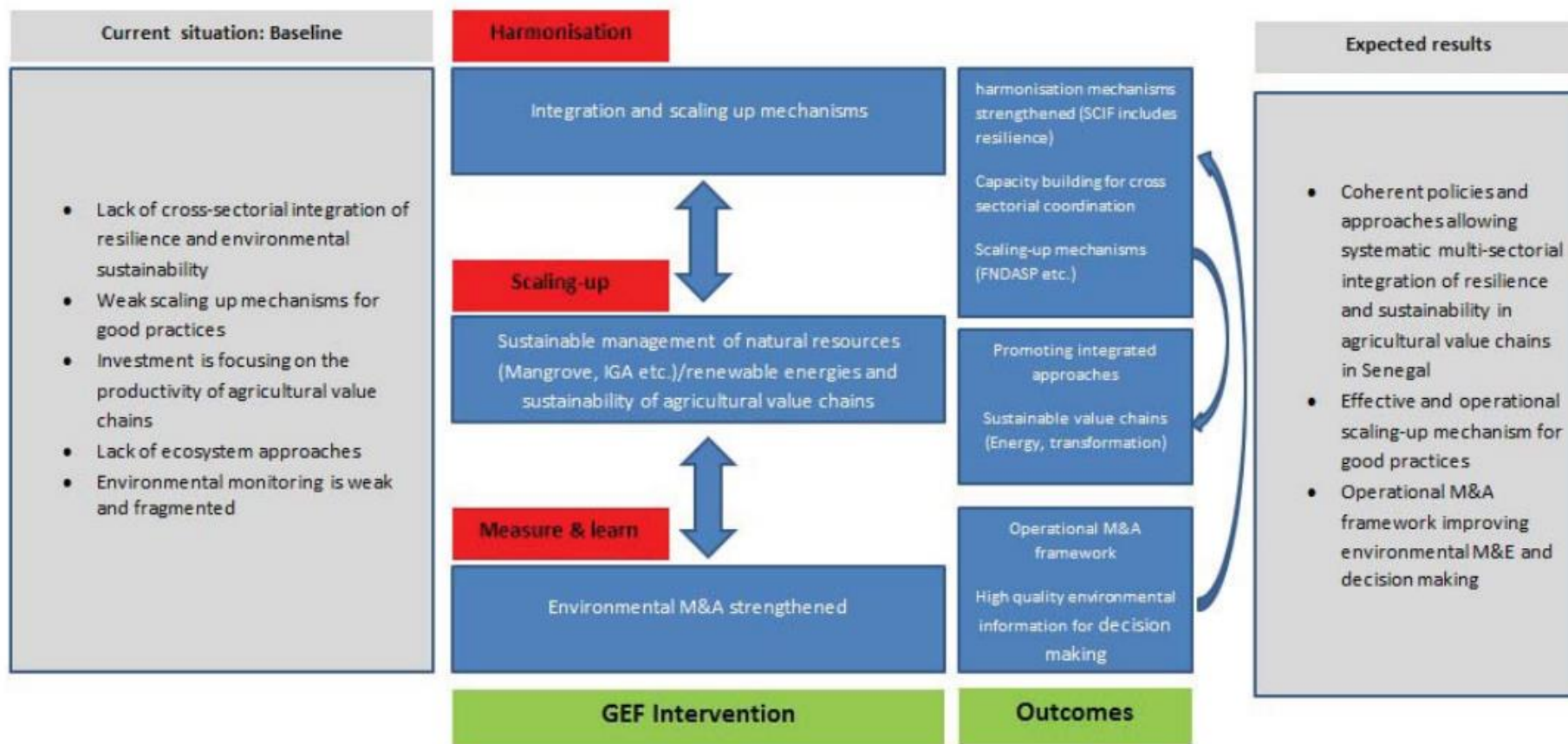
<sup>35</sup> GEF/C.41/10/Rev.1 available at: [http://www.thegef.org/sites/default/files/council-meetingdocuments/C.41.10.Rev\\_1.Policy\\_on\\_Environmental\\_and\\_Social\\_Safeguards.Final%20of%20Nov%2018.pdf](http://www.thegef.org/sites/default/files/council-meetingdocuments/C.41.10.Rev_1.Policy_on_Environmental_and_Social_Safeguards.Final%20of%20Nov%2018.pdf)

#	Evaluation criteria	Evaluation key questions (TOR)	Additional guiding questions proposed
		been achieved or are likely to be achieved?	To what extent is the identified progress result of the project attributable to the intervention rather than to external factors? What is the opinion of the beneficiaries concerning effectiveness?
3	Coherence		Was the project design coherent with the complexity of the subject matter, the prevailing institutional context and the qualifications of the involved human resources?
4	Efficiency	Has the project done things right, with good value for money? How well has the project fit?	Was project management efficient in terms of timelines, human resources and financial management? What are the disbursement rates per financier and project component? What is the ratio between project management and total costs? What is the per beneficiary household project cost?
5	Sustainability of benefits	To what extent are the achieved results to be sustained after the completion of the project? What are the key risks (e.g., in terms of financial, socio-political, institutional and environmental risks) and how these risks may affect the continuation of results after the project ends?	Has PARFA included a risk analysis and a risk management strategy at design? Has risk management been an issue during implementation? Has PARFA included an exit strategy at design or was this issue raised during implementation? What is the level of stakeholder ownership?
<b>D</b>	<b>Cross-cutting performance criteria</b>		
1	Gender mainstreaming		Have gender and youth specific objectives and indicators been formulated? Have gender and youth specific data been recorded and reported on? What are the views of women and youth on effective mainstreaming?
2	M&EL <ul style="list-style-type: none"> <li>• M&amp;E design</li> <li>• M&amp;E implementation</li> </ul>		Has the M&E system adopted been in line with the underlying logframe? Were the proposed indicators SMART (simple, measurable, achievable, relevant and time-bound)? Have data outputs from M&E been used for periodic reporting?
3	Results-based Management (RBM)		Have data outputs from M&E been used for project steering and management?

#	Evaluation criteria	Evaluation key questions (TOR)	Additional guiding questions proposed
<b>E</b>	<b>Performance of partners</b>		
1	UNIDO, IFAD		<p>Were the contractual arrangements (with the Government of Senegal, GEF and bilaterally with IFAD) explicit enough for an effective and efficient project management?</p> <p>How adequate were the overall project management and UNIDO's project management set-ups (Figures 1 and 2 of the TORS)?</p> <p>Were supervisions jointly implemented?</p> <p>Was reporting done jointly?</p> <p>Were there agreed mechanisms of coordination between IFAD and UNIDO, and records thereof, such as meeting minutes?</p>
2	National counterparts		<p>How conducive was the performance of MAER (steering committee, technical committee, PCU)?</p> <p>With which national counterparts, except for MAER, did PARFA have sustained working relations?</p> <p>Were such relations established on contractual bases?</p>
3	Donor		<p>What was the role of GEF, or the GEF focal point, during project implementation?</p> <p>Did GEF comment on environment and climate change relevant topics reported by PARFA and the specialized national counterparts?</p>
<b>F</b>	<b>Overall assessment</b>	What lessons can be drawn from the successful and unsuccessful practices in designing, implementing and managing the project?	<ul style="list-style-type: none"> <li>• What is the overall rating of PARFA with justifications?</li> <li>• To what extent are the lessons of PARFA applicable to generic UNIDO projects, or is PARFA a special case because of its "value-addition architecture" with GEF and IFAD involvement?</li> </ul>

### Annex 3. Original TOC contained in the Project document

Senegal IAP Food Security: Theory of change |



#### **Annex 4: List of documentation reviewed**

- GEF. Agricultural Value Chains Resilience Support Project (PARFA), GEF-6 REQUEST FOR PROJECT ENDORSEMENT/APPROVAL, GEF Project ID: 9134, UNIDO 150071. Submission date: 27 June 2016.
- FIDA, UNIDO. Agricultural Value Chains Resilience Support Project (PARFA), Detailed Design Report, Main Report and Annexes, September 2015 (mission date), document not dated.
- World Bank. World Development Indicators 2015.
- Rapport National sur le Développement Humain au Sénégal (2009).
- UNIDO, UNIDO Independent Evaluation Division. Evaluation Manual, Vienna, 2018.
- IFAD. Project Implementation Report (PIR), Agricultural Value Chains Resilience Support Project, June 2021.
- IFAD. Republic of Senegal, PAFA, Project Completion Report Validation (PCRv), Rome, December 2018.
- UNIDO, IFAD. Senegal, PARFA – IAP Factsheet, September 2016.
- FIDA. République du Sénégal, Agricultural Value Chains Support Project-Extension, Rapport d'achèvement, 18/03/2021.
- UNIDO. Senegal, PARFA, Grant Delivery Report, 22 April 2022.
- Abouelenine Nadine. The PARFA Forum, Final Report, November 2020.
- [Senegal CO2 Emissions - Worldometer \(worldometers.info\)](#), accessed on 18 April 2022.
- [Notre bureau | FAO au Sénégal | Organisation des Nations Unies pour l'alimentation et l'agriculture.](#), accessed on 22 April 2022.
- [Our Work - Wetlands International](#), accessed on 15 April 2022.
- <https://pdcej.sn/presentation/>, accessed on 25 April 2022.
- UNIDO. Senegal, Agricultural Value Chain Resilience Support Project (PARFA), Mid-term Evaluation Report, 1 July 2019 – 30 June 2020.
- UNIDO. Agricultural Value Chain Support Project (PARFA, PTC/AGR Gender Mainstreaming Checklist for Projects, : SGHIR MERYEM, 18 February 2016
- UNIDO. BTO to PTC/AGR/FSU, 30.06.2015.
- UNIDO. BTO to PTC/AGR/FSU, 09.05.2016.
- UNIDO. BTO to PTC/AGR/FSU, 16.07.2017.
- UNIDO. BTO to PTC/AGR/FSU, 08.12.2018.
- UNIDO. BTO to PTC/AGR/FSU, 27.10.2019.
- UNIDO. Rapport de Mission : Participer à la mission d'appui du gouvernement et du FIDA aux projets PAFA-e et PARFA, Appui à la réalisation des DAO des ateliers de production, Revue du travail des partenaires : ITA et CSE, Identification des synergies entre divers partenaires et le PARFA et ONUDI, Jean-François DE SAEDELEER, Mai 2019.
- UNIDO. Rapport de Mission : Participer à la mission de revue mi-parcours du PARFA, Elaboration de synergies entre des partenaires et le PARFA-ONUDI, Jean-François DE SAEDELEER, Octobre 2019.

République du Sénégal, FEM, FIDA, ONUDI. PARFA, procès-verbal de la Réunion de Pilotage sur le PTBA 2019, janvier 2019.

République du Sénégal, FEM, FIDA, ONUDI. PARFA, procès-verbal de la Réunion de Pilotage du PAFA-E et du PARFA, Kaolack, décembre 2019.

République du Sénégal, GEF, FIDA, ONUDI, Centre de Suivi Écologique (CSE). PARFA, Mise en place d'un système de suivi-évaluation de l'impact environnemental dans la zone d'intervention du Projet, Rapport final d'exécution, Dakar, janvier 2021.

## Annex 5a: List of stakeholders consulted

Name, institution	Phone	Email
Ms Meryem Sghir, Industrial Development Officer, Division of Food Security and Nutrition, Department of Agri-Business Development, UNIDO, Vienna	+43-1-26026-3743	<a href="mailto:M.Sghir@unido.org">M.Sghir@unido.org</a>
Mr Christophe Olivier Renaud Yvetot, UNIDO Field Office, Dakar	+221 33 8596774	<a href="mailto:office.senegal@unido.org">office.senegal@unido.org</a>
Mr Amath Pathe Sene, Lead, regional environment and climate specialist, Head of hub and Country Director ad interim., Côte d'Ivoire, Abidjan		<a href="mailto:amath.sene@ifad.org">amath.sene@ifad.org</a>
Mr Benoit Thierry, IFAD, West Africa Hub Director, Dakar	+221 77 450 94 58	<a href="mailto:b.thierry@ifad.org">b.thierry@ifad.org</a>
Mr Sémou Diouf, IFAD, Country Programme Manager Senegal, Dakar	+221 77 640 82 20	<a href="mailto:s.diouf@ifad.org">s.diouf@ifad.org</a>
Ms Sakho Jimbira Maam Suwadu, IFAD, Environment and climate specialist, Dakar	+221 78 184 27 66	<a href="mailto:suwadu.jimbira@ifad.org">suwadu.jimbira@ifad.org</a>
Mr Mamadou Ndiaye, Coordinator of the UNIDO portion of the GEF PARFA grant, Dakar	+221 77 514 14 74	<a href="mailto:m.ndiaye@unido.org">m.ndiaye@unido.org</a>
Mr Souleymane Diop, Coordonnateur par intérim du PARFA, DRDR Kaolack	+221 77 527 82 11	<a href="mailto:drdrkaolack@gmail.com">drdrkaolack@gmail.com</a>
Mr Matar Diaga Sarr, Head, rural engineering, PARFA, Dakar	+221 77 240 86 01	<a href="mailto:matardiagasarr@gmail.com">matardiagasarr@gmail.com</a>
Mr Assane Gueye, M&E assistant, PARFA, Dakar	+221 77 967 38 08	<a href="mailto:gueyeass92@gmail.com">gueyeass92@gmail.com</a>
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Mr Abdoulaye Gueye, ADT GERT. Dakar	+221 77 552 65 16	<a href="mailto:Adtgert2@orange.sn">Adtgert2@orange.sn</a>
Mr Ousmane Touré, Président, INTERPENC, Dakar	+221 77 113 83 05	<a href="mailto:interpenc@gmail.com">interpenc@gmail.com</a>

## Annex 5b: List of project sites visited

Place	Object	Contact person	Phone
Kaolack	Meeting with Reginal Forest Office	Colonel Moussa Drame	+221 77 984 03 50
Kaolack	Solar dryer	Ms Sarr	+221 77 977 28 57
Kébé Wolff	Biogas, oil press, straw chopper	Mr Ngor Sarr	+221 77 300 83 42
	Cereal processing	Mr Ngor Diouf	+221 77 190 05 92
Dimiskha	Cereal processing	Mr Ousmane Thiam	+221 78 473 83 91
Koungheul	Solar pumping	Mr Ibrahima Badiane	+221 77 440 07 74
Djiguimar	Rehabilitation of degraded land Soil and water conservation of exonded land	Mr Moustapha Samb Mr Ousmane Touré Mr Babacar Niang	+221 77 734 02 97 +221 76 240 90 13 +221 77 072 68 40
Kaymor	Rehabilitation of degraded land Soil and water conservation of exonded land	Mr Amadou Diaw Mr. Ndiaye Mr Abdou Toure MR. BIRANE Touré	+221 77 413 77 34 +221 77 695 32 30 +221 77 993 54 85 +221 77 162 92 32
Dassilamé	Mangrove rehabilitation	Mr Mamadou Bakhoum	+221 77 54468 25
Bambougar	Mangrove rehabilitation	Ms Mariama Thiare	+221 77 322 90 50
Guagué Chérif	Anti-salt barriers	Mr Mamadou Lamine Diatta	+221 77 208 57 73
Fayil	Anti-salt barriers	Mr Ngor Sarr	+221 77 773 57 93
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Kelle Gueye	Solar dryer	Ms. Diale NDIAYE	+221 77 692 57 97
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Dahra	Dairy processing a solar refrigeration	Ms Deme	+221 77 425 51 52